

EXHIBIT A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Watts et al.
U.S. Pat. No.: 7,460,658 Attorney Docket No.: 35548-0134IP1
Issue Date: Dec. 2, 2008
Appl. Serial No.: 10/663,881
Filing Date: Sep. 16, 2003
Title: APPARATUS, AND AN ASSOCIATED METHOD, FOR
SELECTABLY AND AUTOMATICALLY REDIRECTING A
TELEPHONIC CALL TO A SECONDARY LOCATION

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U.S. Patent and Trademark Office
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**PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT
NO. 7,460,658 PURSUANT TO 35 U.S.C. §§ 311-319, 37 C.F.R. § 42**

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EXHIBITS

- EX1001 U.S. Patent No. 7,460,658 to Watts et al. (“the ’658 patent”)
- EX1002 Excerpts of the Prosecution History of the ’658 patent (Serial No. 10/663,881)
- EX1003 Declaration of Mr. Peter Rysavy
- EX1004 U.S. Patent No. 6,631,186 to Adams et al. (“Adams”)
- EX1005 U.S. Patent No. 6,041,114 to Chestnut (“Chestnut”)
- EX1006-1008 Reserved
- EX1009 Complaint filed in *WSOU Investments LLC v. Huawei Technologies Co., Ltd., et al.*, Case No. 6:20-cv-00892 (W.D. Tx.)
- EX1010-1099 Reserved
- EX1100 Complaints filed in *WSOU Investments LLC v. Huawei Technologies Co., Ltd., et al.*, Case Nos. 6:20-cv-00889, 6:20-cv-00891-00893, 6:20-cv-00916-00917 (W.D. Tx.)
- EX1101 Scheduling Order (Document 29), *WSOU Investments LLC v. Huawei Technologies Co., Ltd., et al.*, Case Nos. 6:20-cv-00889-00893, 6:20-cv-00916-00917 (W.D. Tx.)
- EX1102 Huawei’s Stipulation served in *WSOU Investments LLC v. Huawei Technologies Co., Ltd., et al.*, Case Nos. 6:20-cv-00889, 6:20-cv-00891-00893, 6:20-cv-00916-00917 (W.D. Tx.)

CLAIM LISTING

Claim Element	Language
1[P.1]	In a communication system having a packet data network through which a user selectably communicates at any of a first location and at least a second location and a first telephonic network through which the user also selectably communicates, also at any of the first and at least second locations, respectively,
1[P.2]	an improvement of apparatus for facilitating routing of a call to the user placed by a calling party by way of the first telephonic network to a user located at a selected one of the first location and the at least the second location, said apparatus comprising
1[A.1]	a detector embodied at the packet data network and
1[A.2]	adapted to receive indications provided to the packet data network of at which of the first and at least second locations at which the user selects to communicate by way of the first telephonic network; and
1[B.1]	an indexer coupled to said detector,
1[B.2]	said indexer for forming an index by indexing together values representative of selection made by the user of the selected one of the first and at least second locations together with calling indicia used to route the call to the selected one of the first location and the at least the second location.
2[A]	The apparatus of claim 1 wherein a packet communication station is positioned at least at the selected one of the first and at least second locations and coupled in communication connectivity with the packet data network and
2[B]	wherein the indications provided to the packet data network and detected by said detector are provided by the user through operation of the packet communication station.

3	The apparatus of claim 2 wherein said detector further detects indications of the calling indicia that is indexed together by said indexer with the values representative of the selection made by said indexer.
4	The apparatus of claim 3 wherein the indications of the calling indicia are provided to the packet data network and are provided by the user through operation of the packet communication station.
5[A]	The apparatus of claim 1 wherein a telephonic-network communication station is positioned at least at the selected one of the first and at least second locations and coupled in communication connectivity with the first telephonic network,
5[B]	the telephonic-network communication station identified by a calling code and wherein the calling indicia indexed together by said indexer comprises the calling code identifying the telephonic-network communication station.
6	The apparatus of claim 1 wherein said indexer is coupled to the first telephonic network and the index is accessible therefrom when the calling party places the call to the user.
7[A]	The apparatus of claim 6 wherein the user is associated with a normally-called location, the normally-called location having a normally-called telephonic station associated therewith, and
7[B]	wherein said indexer further indexes the values representative of the normally-called location together with the values representative of the selection made by the user.
8	The apparatus of claim 7 wherein the normally-called location has a normally-called-location dialing code associated therewith and wherein the values representative of the normally-called location indexed by said indexer comprise the normally-called-location dialing code.
9[A]	The apparatus of claim 8 wherein the call placed by the calling party is initiated through entry of the normally-called location dialing code, and

9[B]	wherein said indexer is accessed pursuant to the routing of the call to ascertain the calling indicia used to route the call to the selected one of the first location and the at least the second location.
10	The apparatus of claim 1 wherein the communication system comprises a Service Control Point (SCP) and wherein said indexer is embodied thereat.
11	The apparatus of claim 1 wherein the packet data network comprises a private network portion and wherein said detector is embodied thereat.
12	The apparatus of claim 1 wherein the packet data network comprises a public network portion and wherein said detector is embodied thereat.
13[P.1]	In a method of communicating in a communication system having a packet data network through which a user selectably communicates at any of a first location and at least a second location and a first telephonic network through which the user also selectably communicates, also at any of the first and at least second locations, respectively,
13[P.2]	an improvement of a method for facilitating routing of a call to the user placed by a calling party by way of the first telephonic network to a user located at a selected one of the first location and the at least the second location, said method comprising:
13[A]	detecting, at the packet data network, indications provided to the packet data network of at which of the first and at least second locations at which the user selects to communicate by way of the first telephonic network;
13[B]	forming an index by indexing together values representative of selection made by the user of the selected one of the first and at least second locations together with calling indicia used to route the call to the selected one of the first location and the at least the second location;

13[C]	accessing the index formed during said operation of forming the index when routing the call to the user placed by the calling party; and
13[D]	using information accessed during said operation of accessing to complete the routing of the call.
14[A]	The method of claim 13 wherein a packet communication station is positioned at least at the selected one of the first and at least second locations and is coupled in communication connectivity with the packet data network and
14[B]	wherein said method further comprises the operation of providing, by the user, through operation of the packet communication station, the indications provided to the packet data network of at which of the first and at least second locations at which the user selects to communicate.
15	The method of claim 14 wherein said operation of providing further comprises providing the indications of the calling indicia to the packet data network through operation of the packet communication station.
16[A]	The method of claim 13 wherein the user is associated with a normally-called location, the normally-called location having a normally called telephonic station associated therewith, and
16[B]	wherein said operation of indexing further comprises indexing the values representative of the normally-called location together with values representative of the normally-called location together with values representative of the selection made by the user.
17	The method of claim 16 further comprising the operation, prior to said operation of accessing, of placing the call by the calling party.
18	The method of claim 17 wherein the values representative of the normally-called location comprise a normally-called telephonic dialing code, and wherein said operation of placing

	the call comprises entering the normally-called telephonic dialing code.
19[A]	The method of claim 18 wherein a telephonic-network communication station is positioned at least at the selected one of the first and at least second locations and coupled in communication connectivity with the first telephonic network,
19[B]	the telephonic network communication station identified by a calling code and wherein said operation of indexing indexes together the calling code and the normally-called telephonic dialing code.
20	The method of claim 13 wherein the index fanned during said operation of indexing is embodied at a Service Control Point, the Service Control Point Accessible from the first telephonic network.

Huawei Technologies Co., Ltd. (“Huawei” or “Petitioner”) petitions for *Inter Partes* Review (“IPR”) of claims 1-20 of U.S. Patent No. 7,460,658 (“the ’658 patent”).

I. MANDATORY NOTICES—37 C.F.R. § 42.8(a)(1)

A. Real Party-In-Interest—37 C.F.R. § 42.8(b)(1)

Huawei Technologies Co., Ltd.; Huawei Device USA, Inc.; Huawei Technologies USA Inc.; Huawei Investment & Holding Co., Ltd.; Huawei Device (Shenzhen) Co., Ltd.; Huawei Device Co., Ltd.; Huawei Tech. Investment Co., Ltd.; and Huawei Device (Hong Kong) Co., Ltd. are the real parties-in-interest. No other parties had access to or control over this Petition, and no other parties funded this Petition.

B. Related Matters—37 C.F.R. § 42.8(b)(2)

WSOU Investments, LLC d/b/a Brazos Licensing and Development (“WSOU”)—the alleged Patent Owner—filed a complaint against Huawei Technologies Co., Ltd. and Huawei Technologies USA Inc. asserting the ’658 patent on September 29, 2020 in the U.S. District Court for the Western District of Texas (Case No. 6:20-cv-00892). The complaint was one of six patent lawsuits filed by WSOU against Huawei between September 29, 2020 and October 2, 2020:

Attorney Docket No. 35548-0134IP1
IPR of U.S. Patent No. 7,460,658

Asserted Patent No.	Civil Case No. (W.D. Tex.)
6,704,304	6-20-cv-00889
7,406,260	6-20-cv-00891
7,460,658	6-20-cv-00892
7,933,211	6-20-cv-00893
7,406,074	6-20-cv-00916
7,423,962	6-20-cv-00917

None of the six asserted patents is related to another.

Petitioner is not aware of any disclaimers or reexamination certificates addressing the '658 patent.

C. Lead And Back-Up Counsel—37 C.F.R. § 42.8(b)(3)

Huawei provides the following designation of counsel.

Lead Counsel	Backup counsel
Michael T. Hawkins, Reg. No. 57,867 Fish & Richardson P.C. 3200 RBC Plaza 60 South Sixth Street Minneapolis, MN 55402 Tel: 612-337-2569 hawkins@fr.com	Kim Leung, Reg. No. 64,399 Tel: 858-6784713 / leung@fr.com Nicholas Stephens, Reg. No. 74,320 Tel: 612-766-2018 / nstephens@fr.com Kenneth Hoover, Reg. No. 68,116 Tel: 512-226-8117 / hoover@fr.com Sangki Park, Reg. No. 77,261 Tel: 612-638-5763 / spark@fr.com Rishi Gupta, Reg. No. 64,768 Tel: 214-292-4056 / rgupta@fr.com Patrick J. Bisenius, Reg. No. 63,893 Tel: 612-766-2048 / bisenius@fr.com Terry J. Stalford, Reg. No. 39,522

Attorney Docket No. 35548-0134IP1
IPR of U.S. Patent No. 7,460,658

	Tel: (214) 292-4088 / stalford@fr.com
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D. Service Information

Please address all correspondence and service to the address listed above.

Huawei consents to electronic service by email at 35548-0134IP1@fr.com

(referencing No. 35548-0134IP1 and cc'ing PTABInbound@fr.com and hawkins@fr.com).

II. PAYMENT OF FEES

Huawei authorizes the Office to charge Deposit Account No. 06-1050 for the fee set in 37 C.F.R. § 42.15(a) and further authorizes payment for any additional fees to be charged to this Deposit Account.

III. REQUIREMENTS FOR IPR

A. Standing

Huawei certifies that the '658 patent is available for IPR and that Huawei is not estopped from requesting IPR.

B. Challenge and Relief Requested

Huawei requests IPR of claims 1-20 of the '658 patent on the grounds listed below. A declaration from Mr. Peter Rysavy (EX1003) supports this Petition.

Grounds	Basis for Rejection
Ground 1	Claims 1-10 and 12-20 are obvious under 35 U.S.C. §103 based upon U.S. Patent No. 6,631,186 (“Adams”)
Ground 2	Claims 1-20 are rendered obvious under 35 U.S.C. §103 based upon Adams in view of U.S. Patent No. 6,041,114 (“Chestnut”)

The ’658 patent does not make a claim of priority. For purposes of this Petition, Huawei treats September 16, 2003 as the Critical Date for evaluating prior art status:

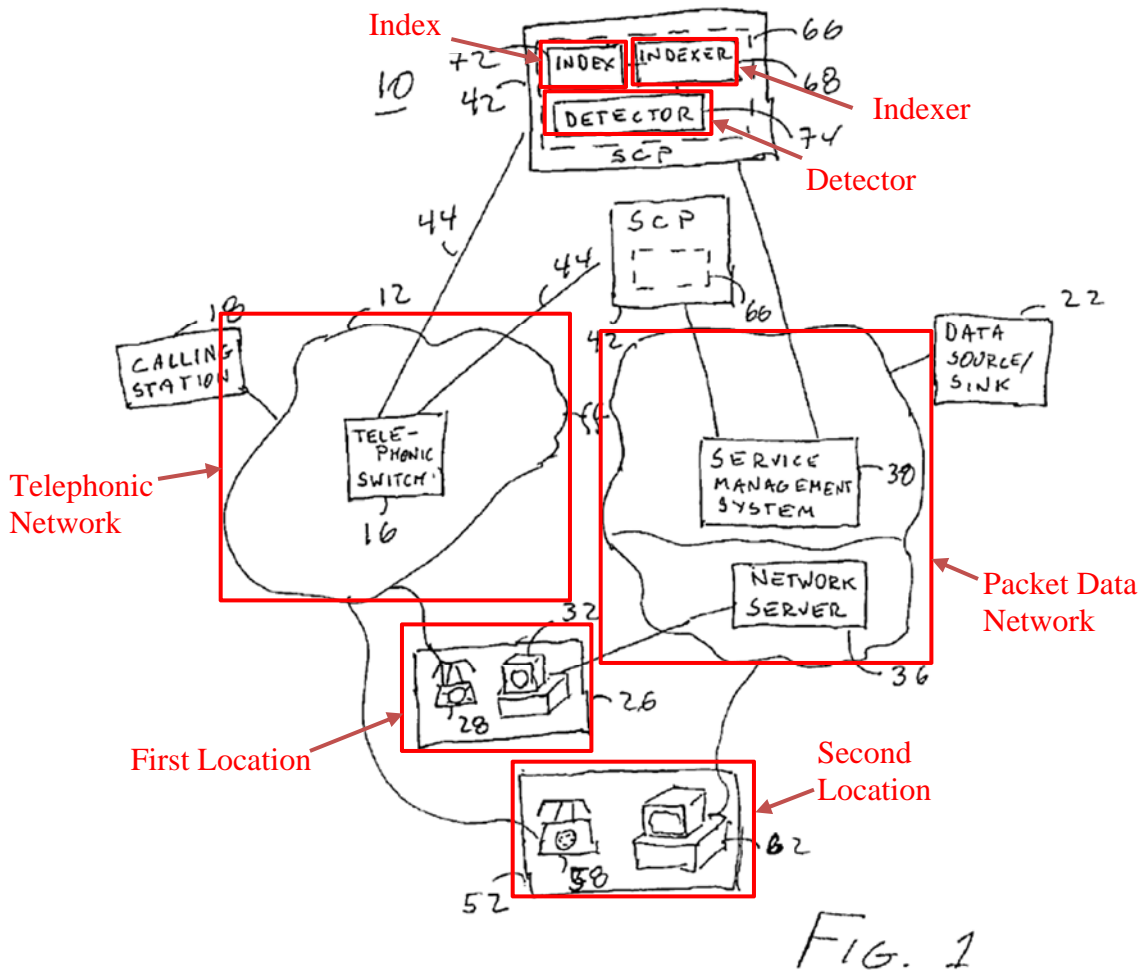
Reference	Publication	Status
Adams (EX1004)	Oct. 7, 2003 (filed Nov. 21, 2000)	102(e)
Chestnut (EX1005)	Mar. 21, 2000	102(b)

None of the references was cited during examination.

IV. THE ’658 PATENT

A. Brief Description

The ’658 patent relates to redirecting a call placed by a calling party to deliver the call to a telephonic station positioned at a secondary location. EX1001, 1:7-10, 3:41-45, FIG. 1; EX1003 ¶¶24-28. An example of the system is shown in FIG. 1:



EX1001, FIG. 1 (annotated); EX1003, ¶25.

In the '658 patent, a detector 74 receives an indication provided to a packet data network 14 of a first location 26 or second location 52 from where a user selects to communicate using a telephonic network 12. EX1001, 5:45-50, 7:61-64, 8:2-4. An indexer 68 creates an index 72 that indexes values representative of the selection made by the user of the first location 26 or the second location 52 together with calling indicia used to route the call to the selected first location 26

or second location 52. EX1001, 5:51-55, 7:58-60, 8:4-5.

B. Summary of the Prosecution

In the sole office action, the examiner rejected the claims based on Staples (US 5,889,845) and Zwick (US 5,185,786). EX1002, 130-137. The examiner stated that “Staples differs from the instant application is that in Staples, virtual presence server 106/detector is in the office, while the instant application the detector embodied at the packet data network.” EX1002, 133 (underlining in original). In response to the office action, the applicant argued that Staples’ disclosure of “the virtual presence server instruct[ing] the corporate PBX to automatically forward the remote user’s office calls to the remote user at the remote location” fails to disclose the claimed indexer. EX1002, 152.

As described below, more pertinent prior art publications never considered by the examiner disclosed these features. EX1003, ¶¶29-34.

V. LEVEL OF ORDINARY SKILL

A person of ordinary skill in the art at the time of the ’658 patent (a “POSITA”) would have had at least a Bachelor’s degree in computer science, computer engineering, electrical engineering, or a related field, with 2-3 years of experience in information or communication systems. EX1003, ¶20. Such experience could be obtained through research and study in a graduate program or through comparable exposure to research literature through industry employment

working in the field of network routing, and additional years of experience could substitute for the advanced-level degree. *Id.*

VI. CLAIM CONSTRUCTION

All claim terms should be construed according to the *Phillips* standard. *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005); 37 C.F.R. §42.100. In the Related Litigation, a *Markman* hearing is scheduled for August 12, 2021. EX1101, 3. For purposes of Grounds 1-2 in this Petition, no construction is necessary due to the noticeable overlap between the preferred embodiment of the '658 patent and the systems detailed in the IPR grounds below. *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011).

VII. THE CHALLENGED CLAIMS ARE UNPATENTABLE

A. GROUND 1—Adams Renders Obvious Claims 1-10 and 12-20

1. Claim 1

Element 1[P.1]

To the extent the preamble is treated as a limitation, Adams recites the Internet, which is a packet data network. EX1004, 5:21-37, 6:18-32, FIG. 1. The system includes a web server, through which a subscriber operating a web client receives call forwarding service data and sends instructions to control the call forwarding service through a packet switched data network. *Id.* FIG. 1 shows a

web client 30 that communicates with web server 54 via Internet 44:

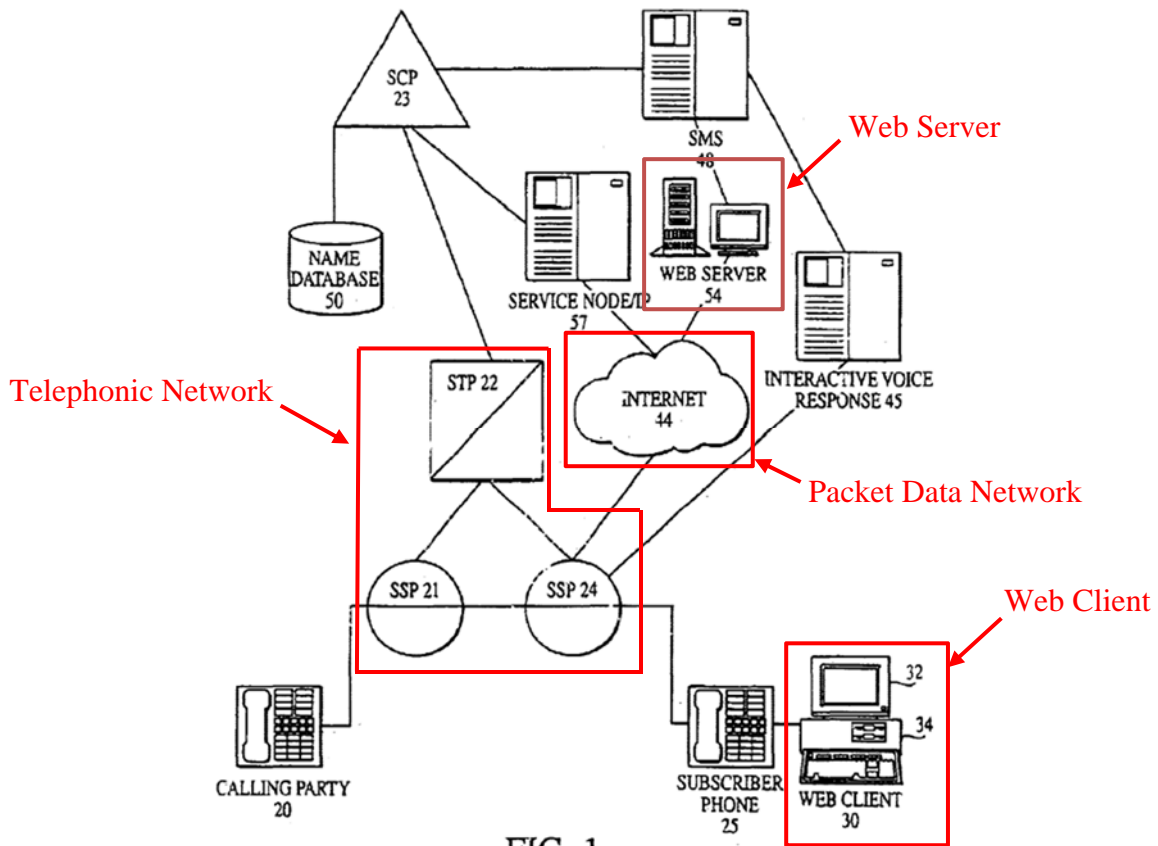


FIG. 1

EX1004, FIG. 1 (annotated); EX1003, ¶¶36-54, 63. Adams describes an apparatus and method that allow a subscriber connected to the Internet to customize and execute the call forwarding services, with near real-time access to the service data. EX1004, 5:21-37. Adams' data network includes a web client 30, a web server 54, and a service management system (SMS) 48, connectable through the Internet 44. EX1004, 13:41-56. The web client 30 includes a personal computer (PC). *Id.*

Adams' web client 30 is a PC coupled to the Internet. EX1004, 15:60-62.

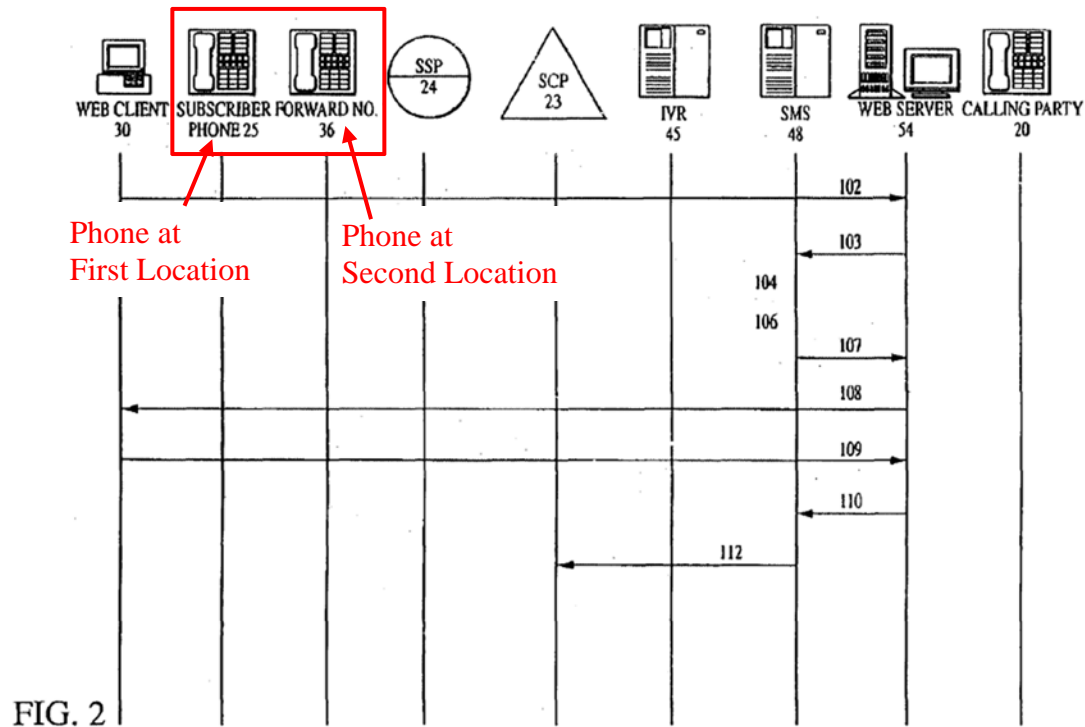
The evidence confirms that, based upon Adams' disclosure, a POSITA would have

understood a user would access Adams' call forwarding systems from any location using a web client that is coupled to the Internet. EX1004, 13:41-56, 15:60-62; EX1003, ¶64. Adams states that the "inability to implement desired changes [to a user's services] is especially troublesome considering that users are often interested in altering some call services...when they are away from their home or business telephone and PC." EX1004, 2:36-40. Adams, thus, allows for the user to implement desired changes when they are away from their home or business telephone and PC. EX1003, ¶64. This advantage over the prior art would require a user to be able to access a phone or a PC from any location. *Id.*

Adams also describes a first telephonic network, such as those compatible with Signaling System 7 (SS7) protocols. EX1003, ¶65. Adams describes service switch points (SSP) 21 and 24 and a signaling transfer point (STP) 22. EX1004, 12:62-67. The subscriber phone 25 and calling party 20 can make calls using various components of the telephonic network. EX1004, 5:21-37, 6:18-32, 12:65-67, 13:21-31, 13:41-56, 15:60-62, FIG. 1; EX1003, ¶65. Adams also describes a service control point (SCP) that processes telephone calls in a public switched telecommunications network (PSTN). EX1004, 9:39-40, 12:5-8.

In Adams, a user selectably communicates at any location using the telephonic network. EX1003, ¶66. The evidence confirms that, based on Adams' disclosure of call forwarding, the user receives calls from a calling party at various

telephonic devices at various locations. *Id.* For example, FIG. 2 shows a subscriber phone and a forward number phone:



EX1004, FIG. 2 (annotated); EX1003, ¶66. FIG. 7 displays a forward-to-number box 86, which is the telephone number to which incoming calls are forwarded:

Change Your Subscription - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss On! Home

Address: http://www.1000.com/Service/Off/Time/Off/3400+AMERew/Off/Time/83320400/Voice/Response/PIN/Forward-To/Number/

SMS Change Feature Information

You can change the information for this feature in the form below. Then, click "Next" to continue.

Step 2
Change Feature

If you change your mind and wish to undo the changes for this feature, click "Reset". To undo all the feature changes you have made so far, click "Cancel."

Change Your Subscription

Subscription Name: 3122222222
Service: Flexible_Call_Forwarding, Version 00021
Subscription Key: 3122222222

Call Fwd Service On: ☐ 80
Priority List On: ☐ 81 Web Schedule On: ☐ 82
Service Off Date: 07/11/2000 83
Service Off Time: 09:00 AM 84
Voice Response PIN: **** 85
Forward-To Number: 86

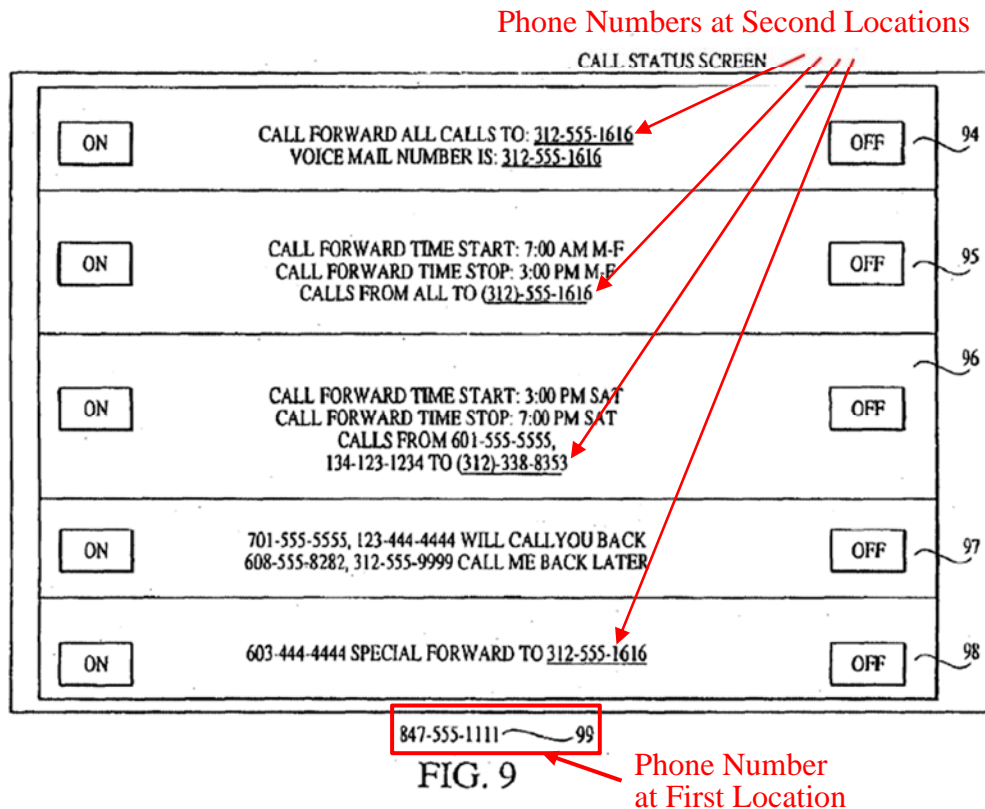
Cancel Reset 87 Next

Done Internet

Phone Number at Second Location

FIG. 7

EX1004, 17:52-54, FIG. 7 (annotated); EX1003, ¶66. FIG. 9 also shows forwarding numbers:



EX1004, 18:51-19:7, FIG. 9 (annotated); EX1003, ¶66. While Adams describes the forwarding number “312-555-1616” in FIG. 9 as a voice mail number, a POSITA would have recognized that Adams also teaches that the forwarding number can be a phone number at any second location. EX1004, 18:44-47, FIG. 9; EX1001, 4:63-67, 8:49-53, 9:24-26; EX1003, ¶66. For example, Adams describes another forwarding number 312-338-8353, which is a priority forwarding number. EX1004, 18:59-63, FIG. 9; EX1003, ¶66.

Element 1[P.2]

To the extent the preamble is treated as a limitation, Adams’ Background

section explains that “current Internet based systems have several drawbacks...including the inability to ensure near real-time update of services and incompatibility with existing IVR implem[en]tations.” EX1004, 2:19-23. Adams thus describes a system that provides an improvement for “call forwarding services that resolve the previously identified problems, simply and efficiently.” EX1004, 5:23-25; EX1003, ¶67.

Adams’ apparatus allows a subscriber with a web client connected to the Internet to customize and execute the call forwarding services, with near real-time access to the service data. EX1004, 5:21-37; EX1003, ¶68. Adams’ SMS transmits and receives information to and from the SCP. EX1004, 13:47-48. The SMS provides a subscriber interface to the SCP from the web client through the web server, via the Internet. EX1004, 13:50-56. The SMS maintains and distributes subscriber specific data for the Flexible Call Forwarding service. *Id.* Adams’ “call forwarding services...enable subscribers to forward calls to alternative locations.” EX1004, 1:17-19.

Element 1[A.1]

Adams’ SMS (including a detector) is embodied at a packet data network, as shown in FIG. 1 (below). EX1004, 5:56-59, 6:28-30. The SMS operates as a communication interface between the SCP (also including a detector) and the web server (also including a detector) interface, through a packet switched data

network. *Id.* The SMS provides the subscriber interface to the SCP from the web client through the web server, via the Internet. EX1004, 13:40-56. The SMS also maintains and distributes all subscriber specific data for the Flexible Call Forwarding service. *Id.* When a subscriber interacts with the web page to add call forwarding information, the SMS receives the call forwarding information through the Web server, stores it, and also sends that data to the SCP. EX1004, 17:65-18:9. The data stored at the SMS is therefore duplicated by the data stored at the SCP. *Id.*

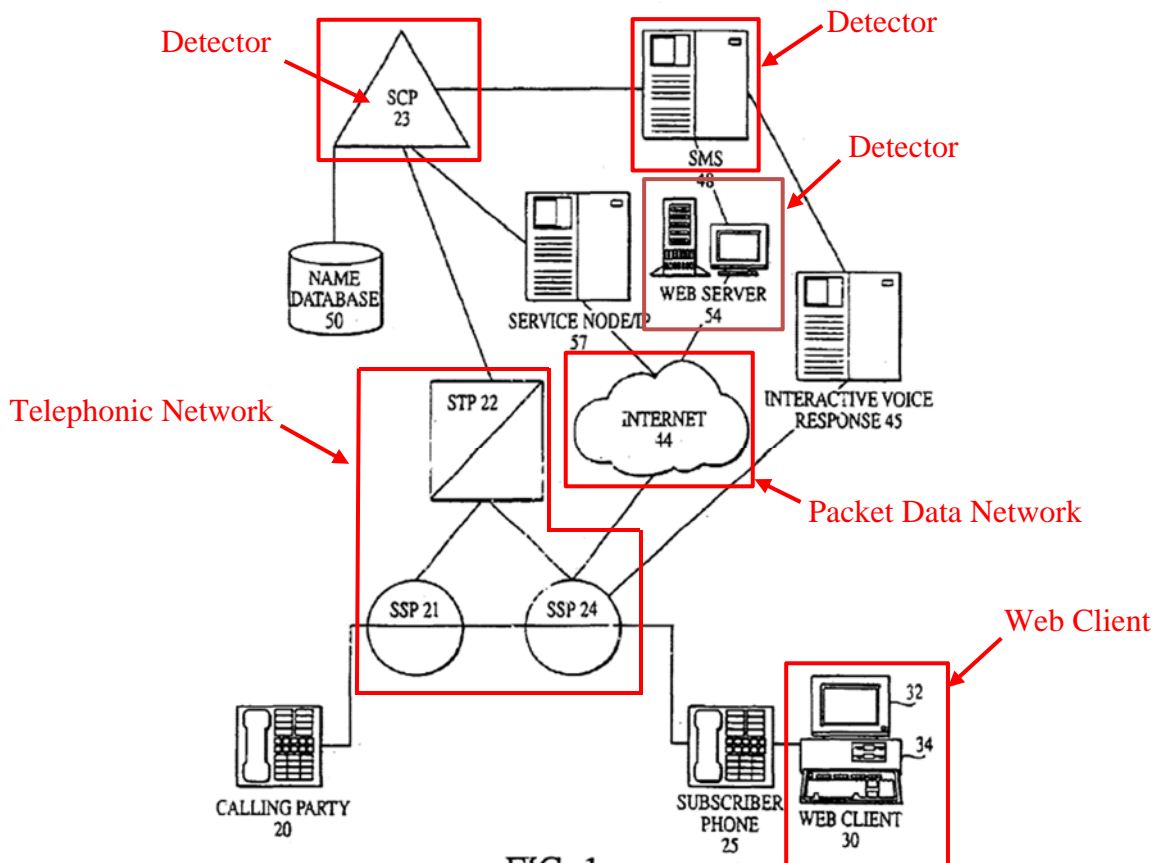


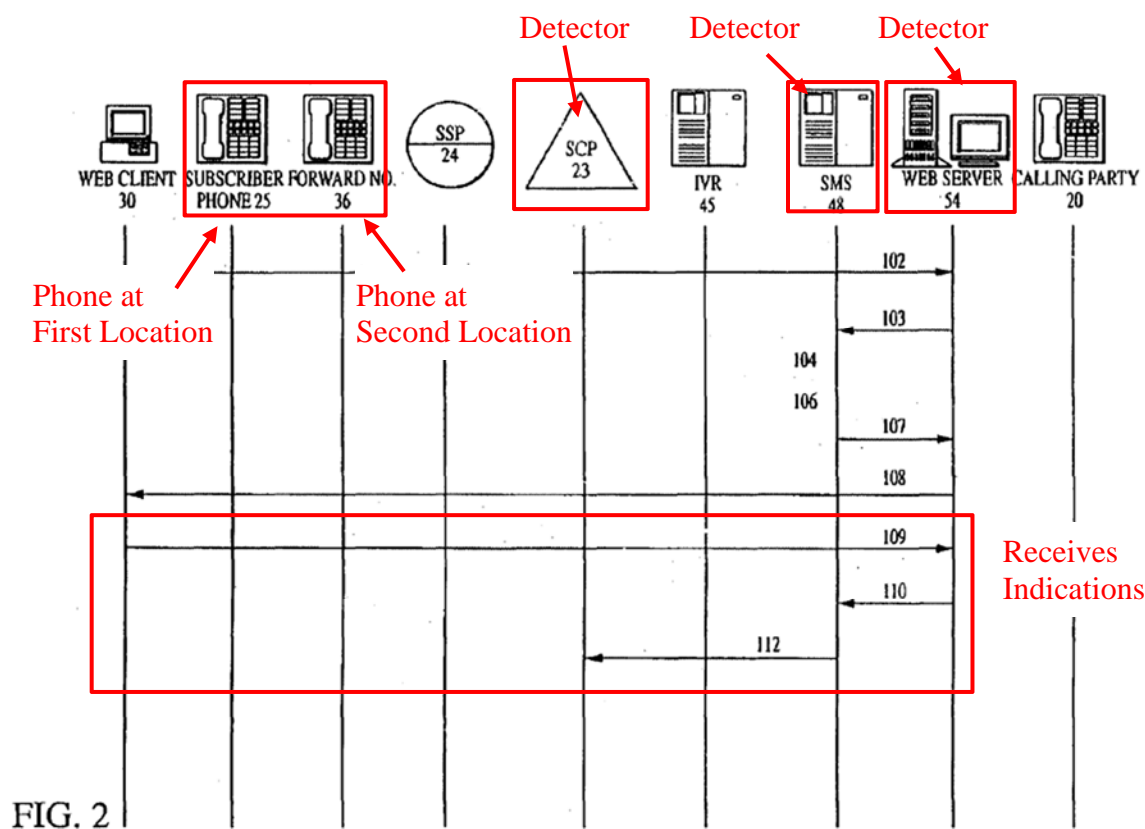
FIG. 1

EX1004, FIG. 1 (annotated); EX1003, ¶69.

Element 1[A.2]

Adams' SMS (including a detector) receives indications through the Internet (packet data network) of at which of the first or second locations the user selects to communicate. EX1004, 13:40-56; EX1003, ¶70. The SMS provides the subscriber interface to the SCP (also including a detector) from the web client through the web server (also including a detector), via the Internet. *Id.* The subscriber sends instructions to control the call forwarding schedule through the web server. EX1004, 6:33-48. The control instructions can include indications of the first or second locations, such as setting an activation time and date, setting a deactivation time and date, and identifying a telephone number to which calls are to be forwarded. *Id.* The SCP processes incoming calls to the subscriber's telephone number in accordance with the updated call forwarding service data, including the instructions (indications). *Id.*

FIG. 2 illustrates a process flow for a subscriber to enter call forwarding instructions (indications) through a web client, which are transmitted across a packet data network and detected by the Web server (including a detector) and the SMS (including a detector) and sent to the SCP (also including a detector):



EX1004, FIG. 2 (annotated); EX1003, ¶71.

FIG. 7 shows an exemplary web page presented to the web client by the SMS for Flexible Call Forwarding. EX1004, 17:26-28. After accessing the web page, the subscriber is presented with a number of options for each telephone number in the account, including various Flexible Call Forwarding features. EX1004, 16:18-21. Instructions (indications) input by the subscriber are sent from the web client through the web server (including a detector) to the SMS (including a detector), indicated respectively at steps 109 and 110 (FIG. 2 above). EX1004, 17:65-18:2. The SMS then sends the instructions (indications) to the SCP (also

including a detector) to update the data stored at the SCP, as shown in step 112 (FIG. 2 above). EX1004, 18:3-8. FIG. 7 also displays a forward-to-number box 86, which is the telephone number to which incoming calls are forwarded. EX1004, 17:52-54.

Change Your Subscription - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss Dell Home

Address: c:\of+Otsu\7%2F11%2F2000\Service+Of+Time+Of+3400+AM+Res+Of+Time+853204006\Voice+Response+PIN+&Forward-To+Number+& Go

SMS Change Feature Information

You can change the information for this feature in the form below. Then, click "Next" to continue.

Step 2
Change Feature

If you change your mind and wish to undo the changes for this feature, click "Reset". To undo all the feature changes you have made so far, click "Cancel."

Change Your Subscription

Subscription Name: 3122222222
Service: Flexible_Call_Forwarding, Version 00021
Subscription Key: 3122222222

Call Fwd Service On: ☐ 80

Priority List On: ☐ 81

Web Schedule On: ☐ 82

Service Off Date: 07/11/2000 83

Service Off Time: 09:00 AM 84

Voice Response PIN: **** 85

Forward-To Number: 86

Cancel Reset 87 Next

FIG. 7

EX1004, FIG. 7 (annotated); EX1003, ¶72. FIG. 7 also includes a call forwarding box 80 for indicating whether Flexible Call Forwarding is on or off. EX1004,

17:29-30. If Flexible Call Forwarding is off, then the system will not forward calls, but rather route calls to the originally dialed number. *Id.*

In Adams, multiple forwarding numbers can be used, each representing at least one second location. EX1003, ¶73. For example, FIG. 9 shows various call forwarding scenarios, including a standard forwarding number (box 94), a forwarding number based on a schedule (box 95), and a forwarding number based on a schedule and calling party (box 96). EX1004, 18:36-63.

CALL STATUS SCREEN

<input type="checkbox"/> ON	CALL FORWARD ALL CALLS TO: <u>312-555-1616</u> VOICE MAIL NUMBER IS: 312-555-1616	<input type="checkbox"/> OFF	94
<input type="checkbox"/> ON	CALL FORWARD TIME START: 7:00 AM M-F CALL FORWARD TIME STOP: 3:00 PM M-F CALLS FROM ALL TO <u>312-555-1616</u>	<input type="checkbox"/> OFF	95
<input type="checkbox"/> ON	CALL FORWARD TIME START: 3:00 PM SAT CALL FORWARD TIME STOP: 7:00 PM SAT CALLS FROM <u>601-555-5555</u> 134-123-1234 TO <u>(312)-338-8353</u>	<input type="checkbox"/> OFF	96
<input type="checkbox"/> ON	701-555-5555, 123-444-4444 WILL CALL YOU BACK 608-555-8282, 312-555-9999 CALL ME BACK LATER	<input type="checkbox"/> OFF	97
<input type="checkbox"/> ON	603-444-4444 SPECIAL FORWARD TO <u>312-555-1616</u>	<input type="checkbox"/> OFF	98

847-555-1111 ~ 99

FIG. 9

EX1004, FIG. 9 (annotated); EX1003, ¶73. FIG. 9 also shows on and off buttons for each call forwarding scenario. *Id.* When call forwarding is off, calls are routed

to the directory number 99, which is the telephone number of the subscriber using the service (at the first location). EX1004, 18:35-50, FIG. 9. When call forwarding is on, calls are routed to the forwarding number (at a second location). *Id.*

Element 1[B.1]

Adams' SMS (including a detector and an indexer) stores updated call forwarding service data. EX1004, 7:65-66, 15:62-64. When a subscriber interacts with the web page to add call forwarding information, the SMS receives the call forwarding information, stores it, and also sends that data to the SCP (also including a detector and indexer). EX1004, 18:1-9. The data stored at the SMS is therefore duplicated by the data stored at the SCP. *Id.* FIG. 1 (below) shows the SCP coupled to the SMS, which each include a detector and indexer coupled to each other:

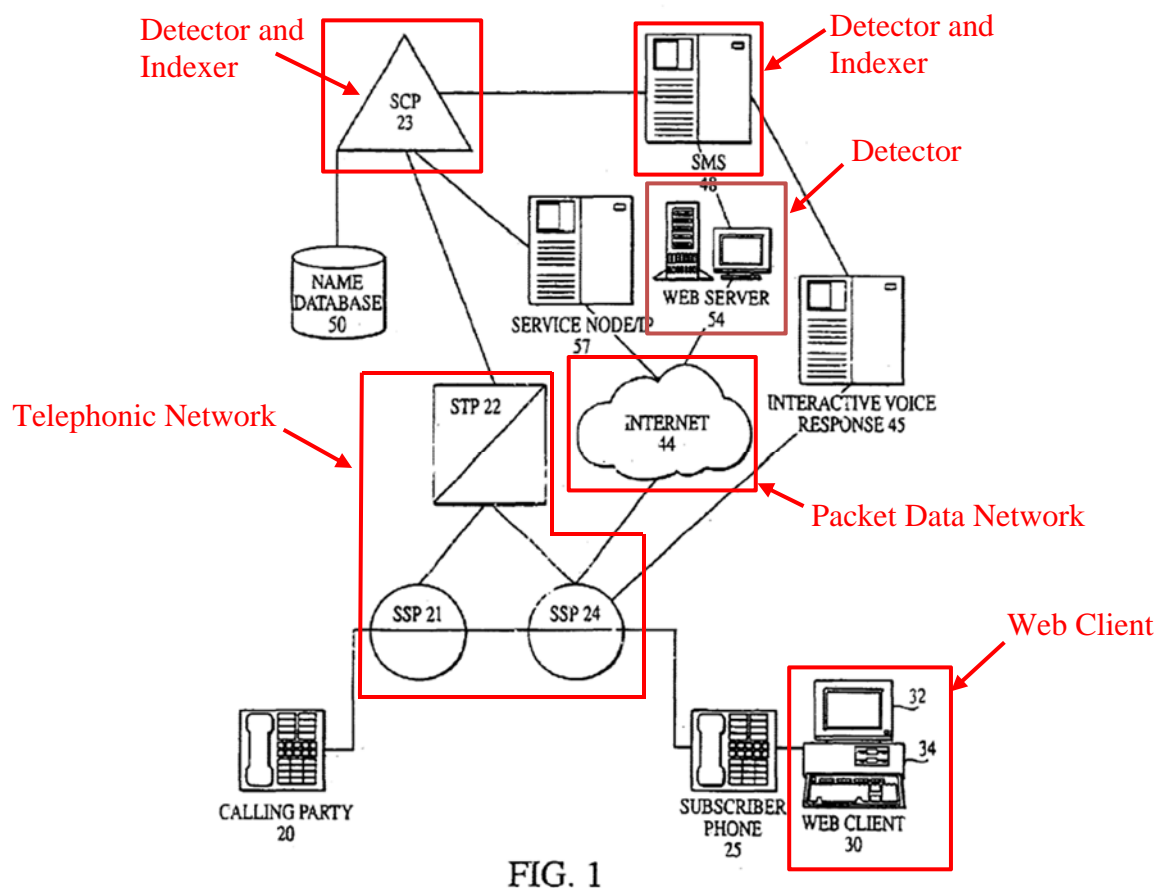


FIG. 1

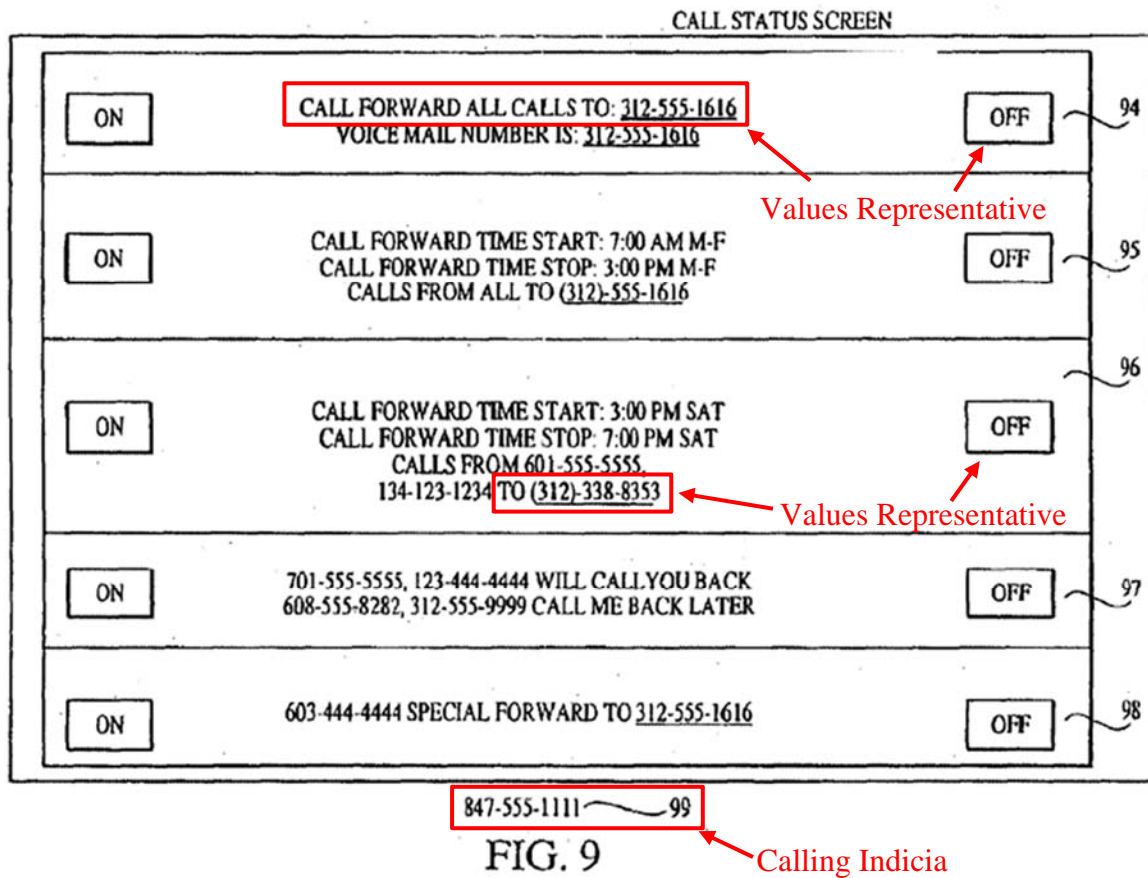
EX1004, FIG. 1 (annotated); EX1003, ¶74.

Element 1[B.2]

Adams' SMS stores updated call forwarding service data. EX1004, 7:65-66, 15:62-64. The SMS receives from the graphical user interface through the server, by way of the packet switched data network, updated call forwarding service data. EX1004, 17:65-18:9. The updated call forwarding service data includes features that have been created or edited by the subscriber. EX1004, 7:58-67. After accessing the web page, the subscriber is presented with a number of options for

each telephone number in the account, including various Flexible Call Forwarding features. EX1004, 16:18-21. When a subscriber interacts with the web page to add call forwarding information, the SMS receives the call forwarding information and stores it. EX1004, 18:1-9. Call forwarding service data corresponds to the subscriber's telephone number (calling indicia) and includes call forwarding instructions (indications) in a PSTN and customized features. EX1004, 6:15-17, 7:14-16, 7:54-56. The call forwarding service data can include instructions for accepting an incoming call, forwarding an incoming call to an alternative telephone number, and processing the incoming call according to the call forwarding service data. EX1004, 6:33-48, 9:13-17, 14:40-63, 15:20-32; EX1003, ¶75.

In Adams FIG. 9, the forward-to numbers are the values representative of the location selected by the user. EX1003, ¶76. In addition, the on/off selections are also values representative of the location because they indicate whether to forward calls to the forward-to number or to route calls to the subscriber's directory number. *Id.* The forward-to numbers and the on/off selections (values representative of selection) are stored together (indexed) with the subscriber's directory number (calling indicia). *Id.*



EX1004, FIG. 9 (annotated); EX1003, ¶76.

Further, Adams discloses that “[t]he call forwarding services include Flexible Call Forwarding,” “which can be implemented...through a Personal Call Manager (PCM) system, along with other telecommunications services...”

EX1004, 5:25-31. Adams further discloses that “Flexible Call Forwarding may be integrated with a Personal Call Manager (PCM) service to enhance functionality and compatibility with other call control services.” EX1004, 22:2-4. Based on Adams’ disclosure, a POSITA would have been motivated to improve Adams’ system (above) by implementing the Flexible Call Forwarding to include the PCM

web pages as part of the graphical user interface provided to the user according to the straightforward suggestion in Adam's PCM example, thereby achieving a predictable and beneficial result. EX1003, ¶77. The evidence here confirms that, based upon Adam's teaching, a POSITA would have recognized the simplicity of such a modification to Adam's system and the reasonable expectation of success in adding the PCM web pages to the graphical user interface. *Id.* The POSITA would have been prompted to implement this modification in Adam's system so as to advantageously provide enhanced functionality for the Flexible Call Forwarding (e.g., functionality to manage multiple telephone numbers in a single account) along with additional functionality for other telecommunication services (e.g., personal directories, caller identification, incoming call manager, and outgoing call control). *Id.*; EX1004, 5:22-31, 24:7-17; 24:46-50, FIG. 17.

Adams shows PCM web pages in FIGS. 17 and 18, which illustrate selection of the subscriber's phone number to open a web page associated with that phone number:

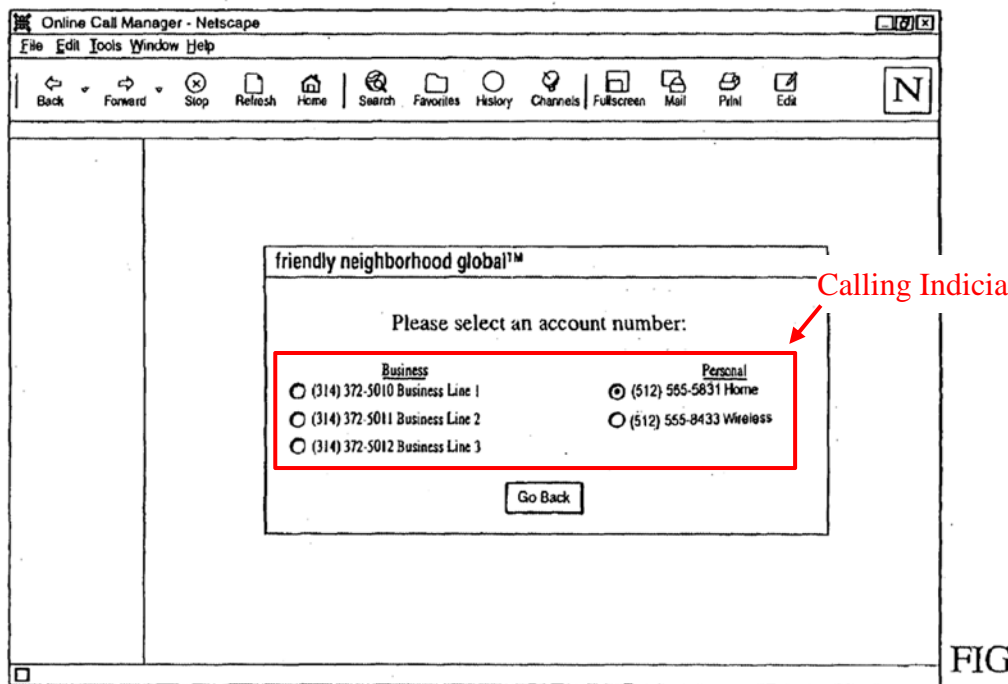
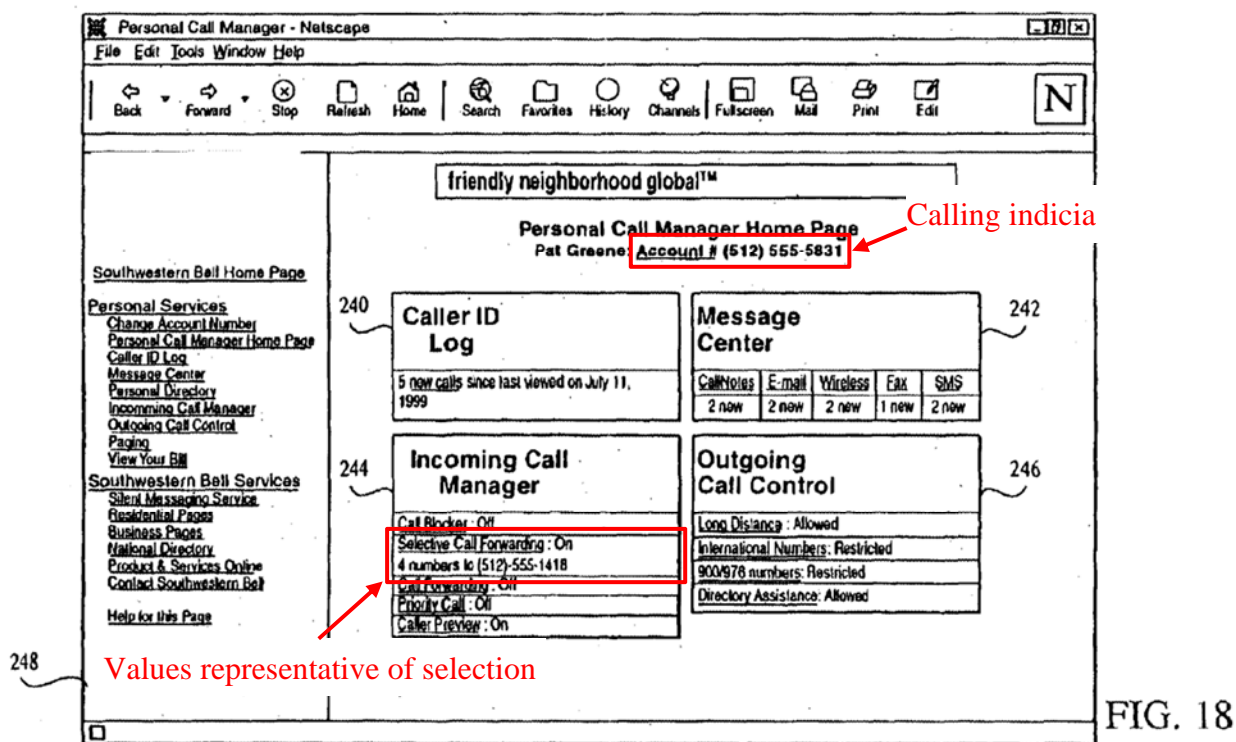


FIG. 17

EX1004, FIG. 17 (annotated), EX1004, 24:7-17; 24:46-50; EX1003, ¶78. FIG. 18

shows a PCM Home Page for the phone number selected in FIG. 17 above.

EX1004, 24:46-50. The services depicted in FIG. 18 include an Incoming Call Manager, which retrieves data from the SCP (also including a detector and indexer) and shows the status of call forwarding. EX1004, 24:65-67.



EX1004, FIG. 18 (annotated); EX1003, ¶78. Thus, FIGS. 9, 17, and 18 indicate that the subscriber's account phone number (calling indicia) is stored in a database (indexed) with the call forwarding on/off selection and corresponding forwarding number (values representative of selection). *Id.*; EX1004, 5:48-50.

In Adams, the data stored (in an index) at the SMS (including an indexer) is duplicated by the data stored at the SCP (also including an indexer). EX1004, 18:8-9. The SCP has a database (index) of call forwarding service data corresponding to a subscriber's telephone number. EX1004, 6:14-16. The database of call forwarding service data corresponding to the subscriber's telephone number is accessible through the SMS from the web client. EX1004, 8:48-9:8. In response to

an incoming telephone call, the SCP compares the called party's telephone number to a list of subscribers in the database, and based on the information for the subscriber in the database (index), determines the forwarding instructions including whether call forwarding is on/off and the forward-to telephone number. EX1004, 20:1-21:56. The SMS and SCP, therefore, each includes an index of the on/off selection and the forward-to-telephone number (values representative of selection) and the subscriber's telephone number (calling indicia). EX1003, ¶79.

2. Claim 2

Element 2[A]

Adams shows a web client (packet communication station) coupled to the Internet (packet data network). EX1004, FIG. 1. The web client is a PC. EX1004, 13:41-45. The evidence here shows that a POSITA would have understood that a PC can be positioned anywhere with access to Internet connectivity, including at a first location or a second location. EX1003, ¶80. FIG. 1 (below) shows the web client coupled to the Internet:

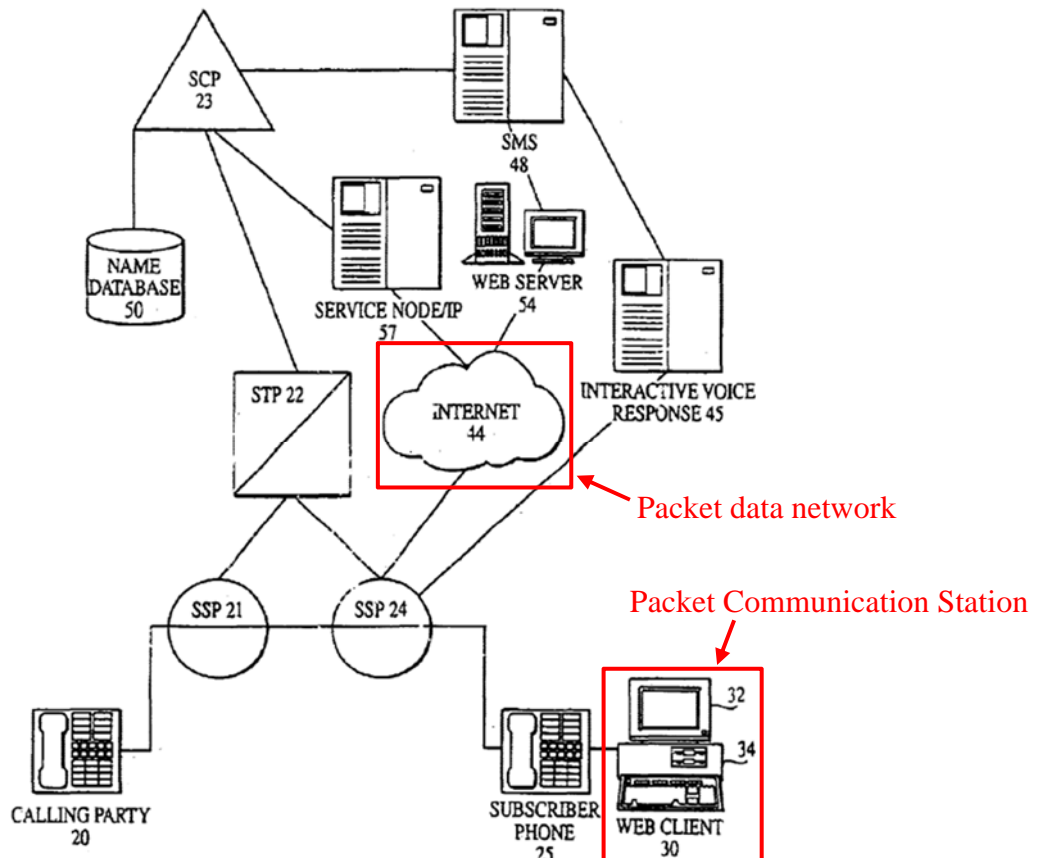


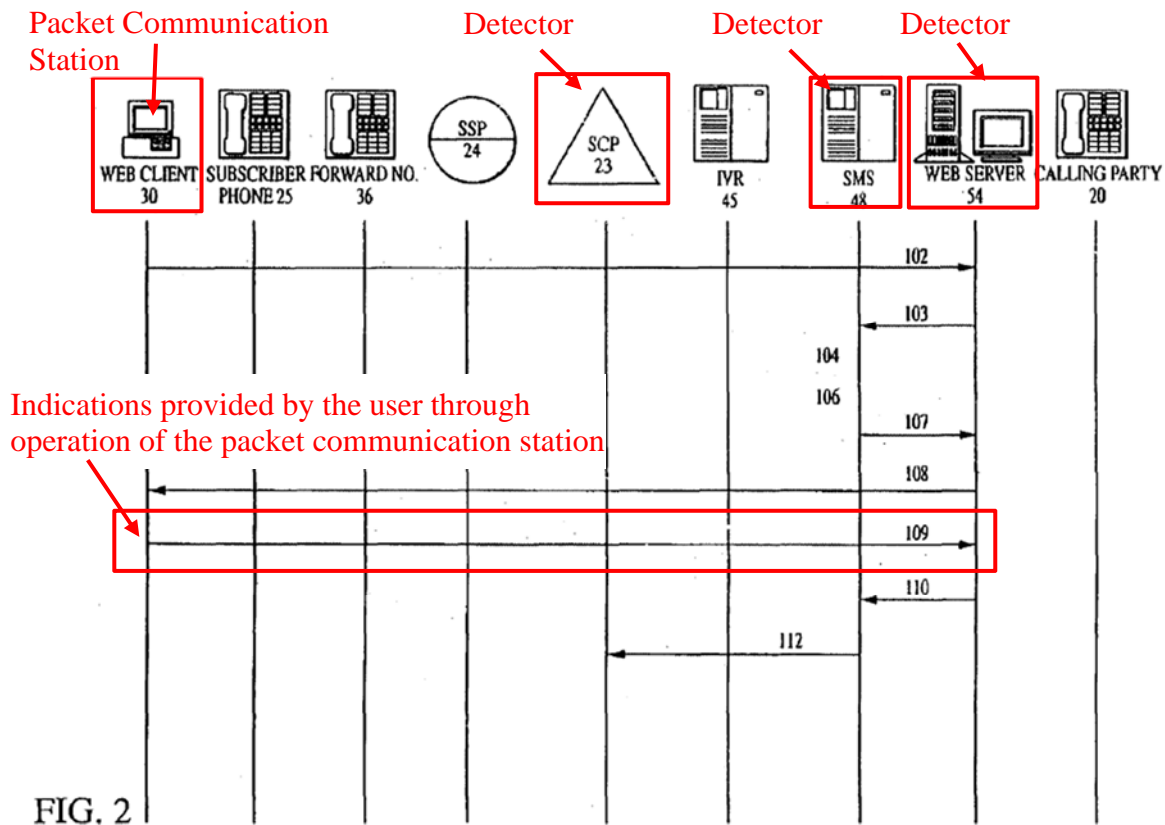
FIG. 1

EX1004, FIG. 1 (annotated); EX1003, ¶80.

Element 2[B]

As stated previously (*supra* Ground 1, 1[A.1]-1[A.2]), the subscriber transmits Flexible Call Forwarding information (indications) from the web client (packet communication station) to a web server (including a detector), SMS (including a detector), and SCP (also including a detector) using the Internet (or other packet data network) to set up call forwarding features. EX1004, 6:33-48, 13:40-56, 17:65-18:9, 28:31-50, FIG. 2. FIG. 2 illustrates a process flow for a

subscriber to enter call forwarding instructions (indications) through a web client (packet communication station), which are transmitted across a packet data network and detected by the Web server, SMS, and SCP:

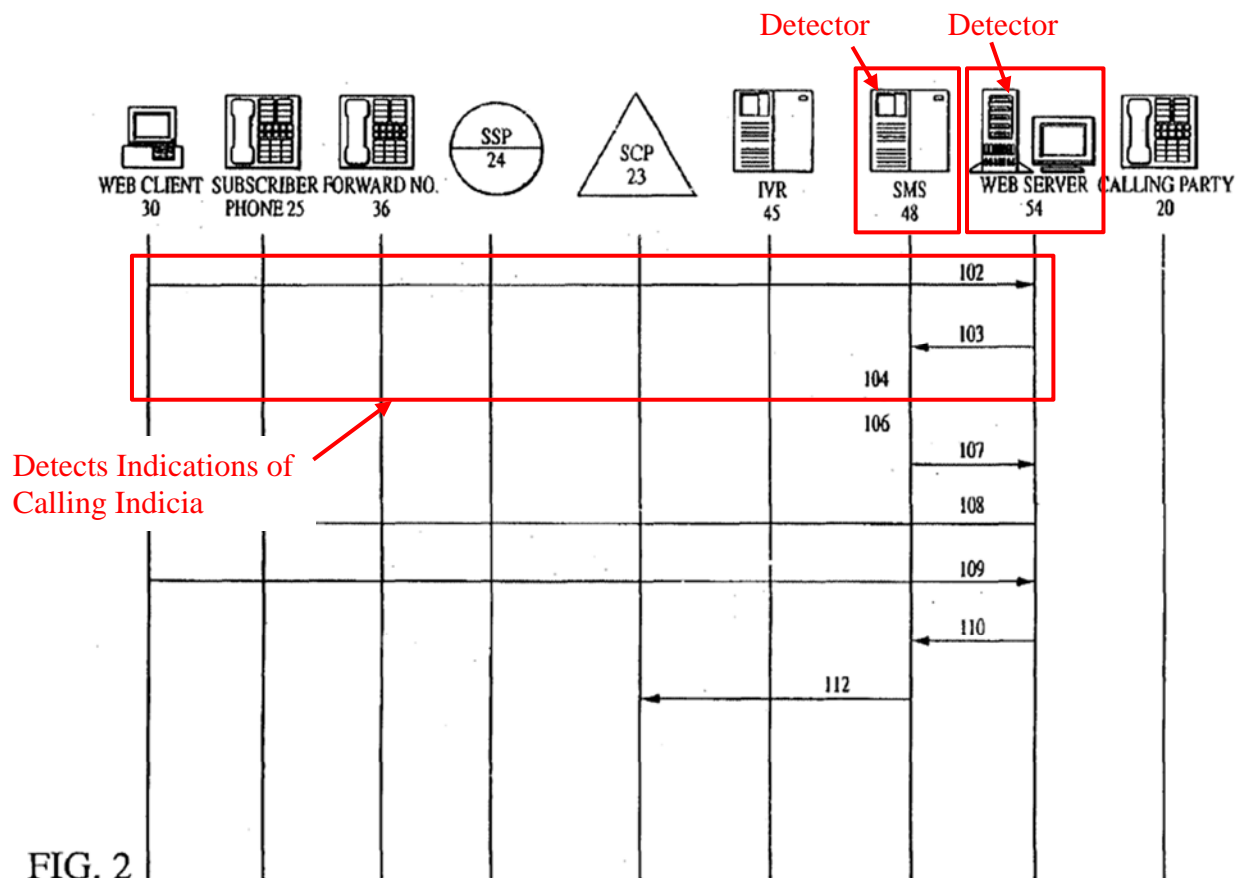


EX1004, FIG. 2 (annotated); EX1003, ¶81.

3. Claim 3

Once Adams' web client is connected to the SMS (including a detector and an indexer) via the web server (including a detector), the user provides authentication information to access the corresponding account. EX1004, 16:3-10. The SMS queries the subscriber for an account number, which is an indication of

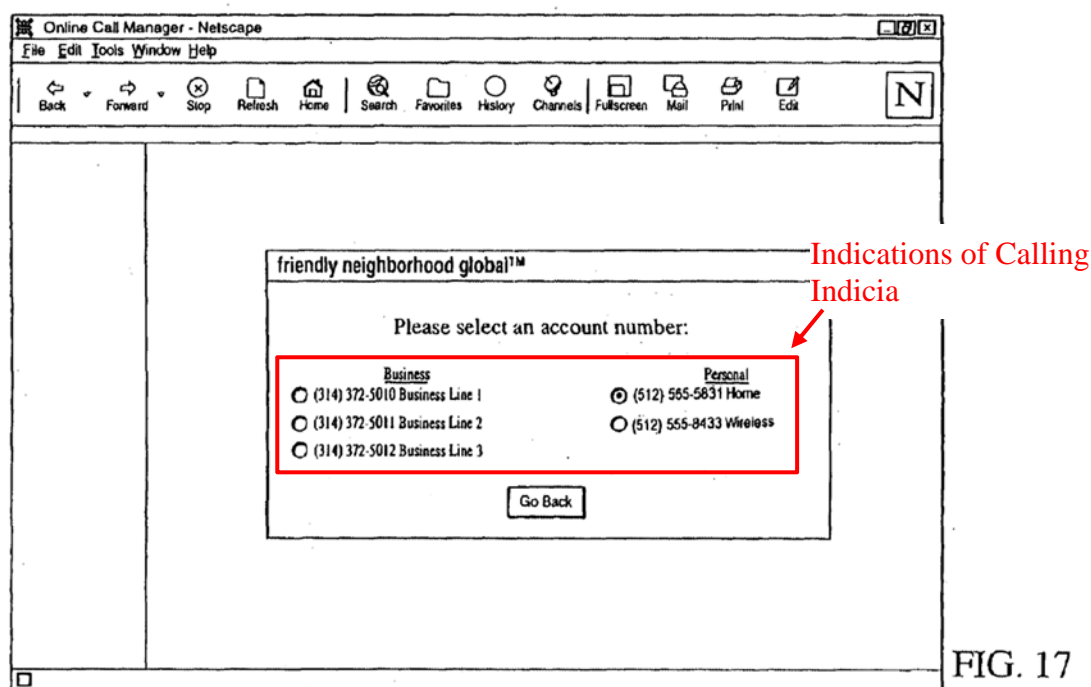
the subscriber's phone number (calling indicia), and associated password, which confirms the user's identity. *Id.* The Web server (including a detector) and SMS (including a detector) receive the account number (indications of the calling indicia) and password from the web client, and then the SMS retrieves the account number and associated password information to confirm that the subscriber is an authorized user. *Id.*



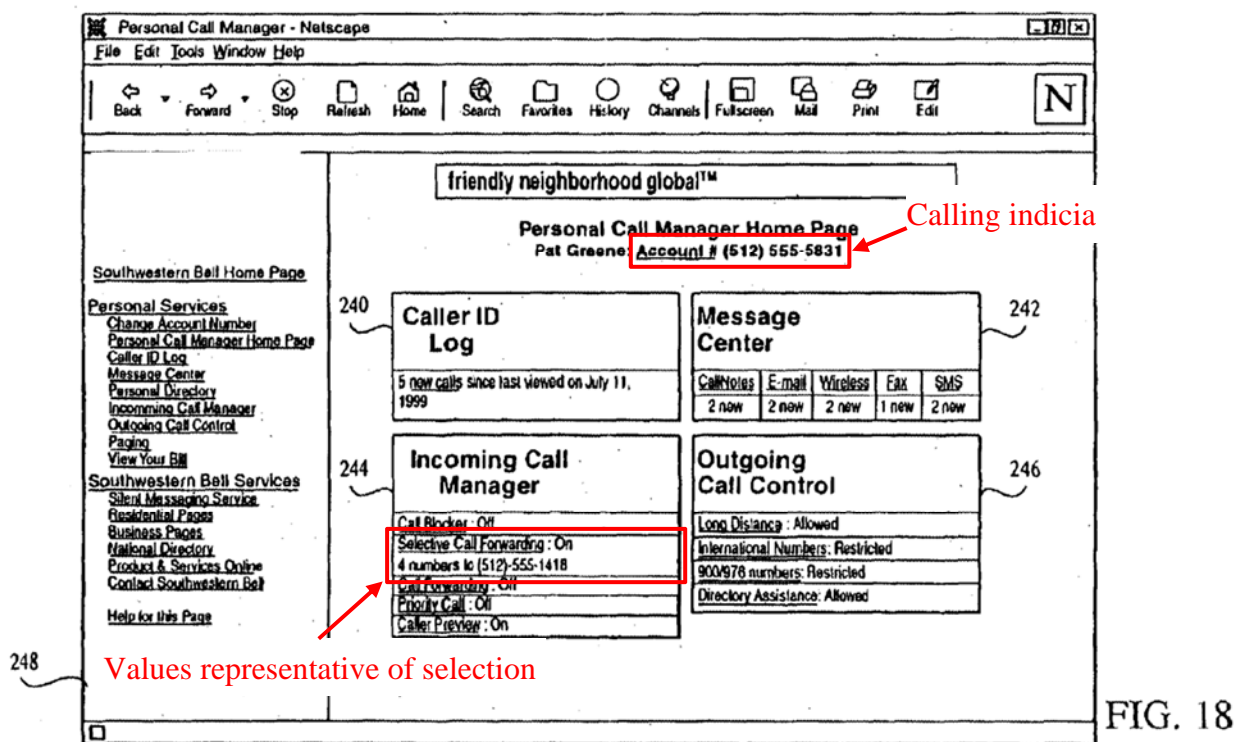
EX1004, FIG. 2 (annotated); EX1003, ¶82.

Additionally, Adams' PCM web pages in FIGS. 17 and 18 illustrate

selection of an indication of the subscriber's phone number to open a web page associated with that phone number. EX1004, 24:7-17; 24:46-50. When a user selects one of the subscriber's account numbers (i.e., phone numbers), Adams' detector detects an indication of the selected account phone number (calling indicia):



EX1004, FIG. 17 (annotated); EX1003, ¶83. FIG. 18 shows a PCM Home Page for the phone number selected in FIG. 17 above. EX1004, 24:46-50. The services depicted in FIG. 18 include an Incoming Call Manager, which retrieves data from the SCP (also including a detector and indexer) and shows the status of call forwarding. EX1004, 24:65-67.



EX1004, FIG. 18 (annotated); EX1003, ¶83. FIG. 18 indicates that the subscriber's account phone number (calling indicia) is stored in a database (indexed) with the call forwarding on/off selection and corresponding forwarding number (values representative of selection). *Id.*; EX1004, 5:48-50.

4. Claim 4

As stated above (*supra* Ground 1, Claim 3), Adams describes that the subscriber uses a web client (packet communication station) to connect to an SMS through a web server via the Internet (packet data network) to enter an account number, which is an indication of the subscriber's phone number (calling indicia), and/or to select one of the subscriber's account phone numbers (calling indicia)

and access the call forwarding features associated with the subscriber's account.

EX1004, 16:3-10, 24:16-17, 24:46-50, 24:65-67, FIGS. 2, 17-18; EX1003, ¶84.

5. Claim 5

Element 5[A]

Adams describes a subscriber phone (telephonic-network communication station) connected to the telephonic network, as shown in FIG. 1:

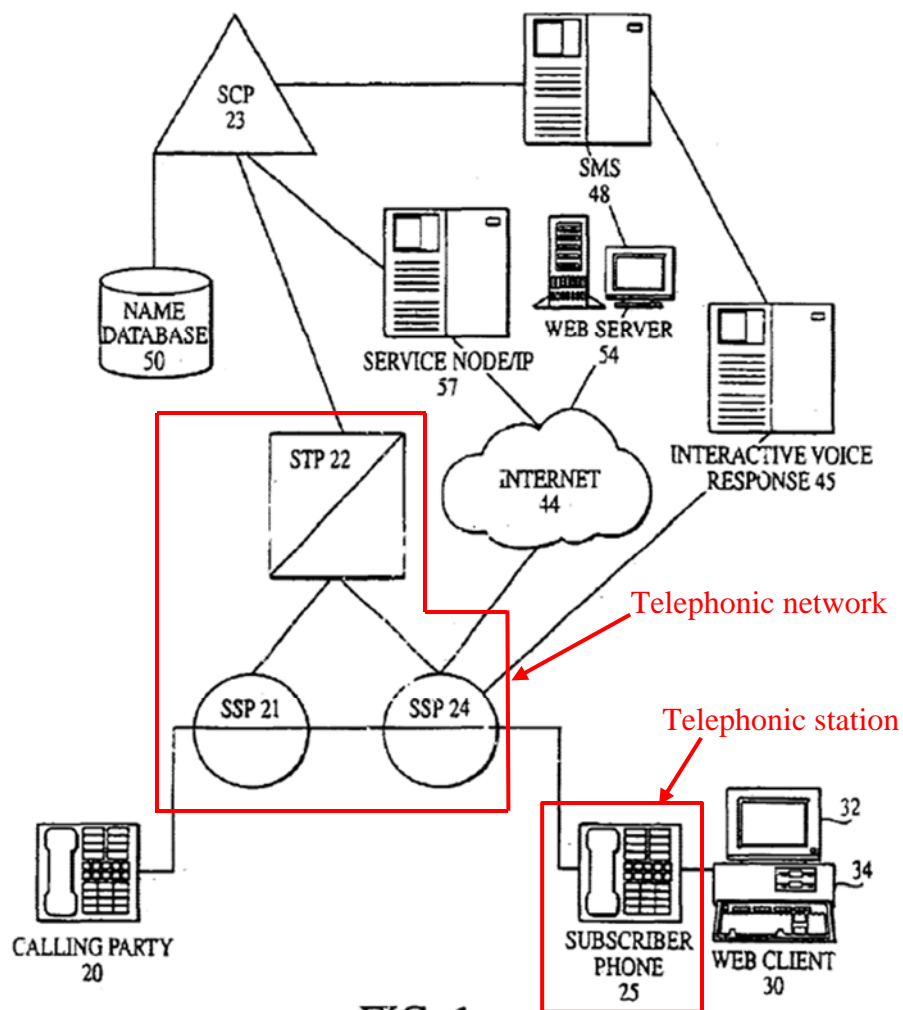
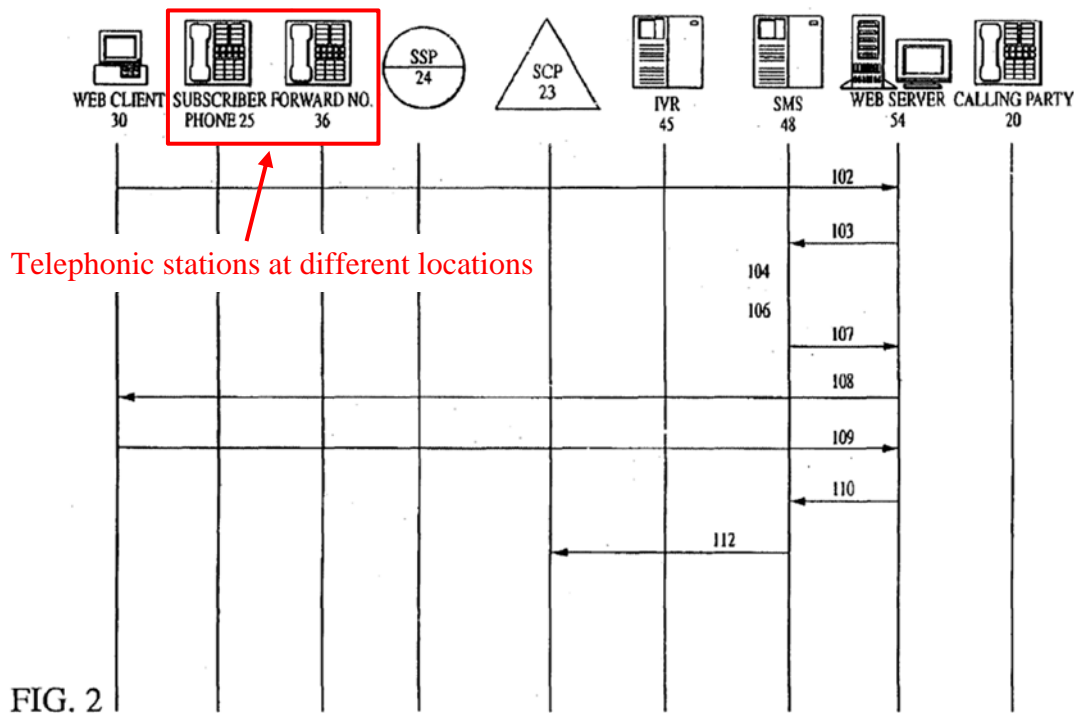


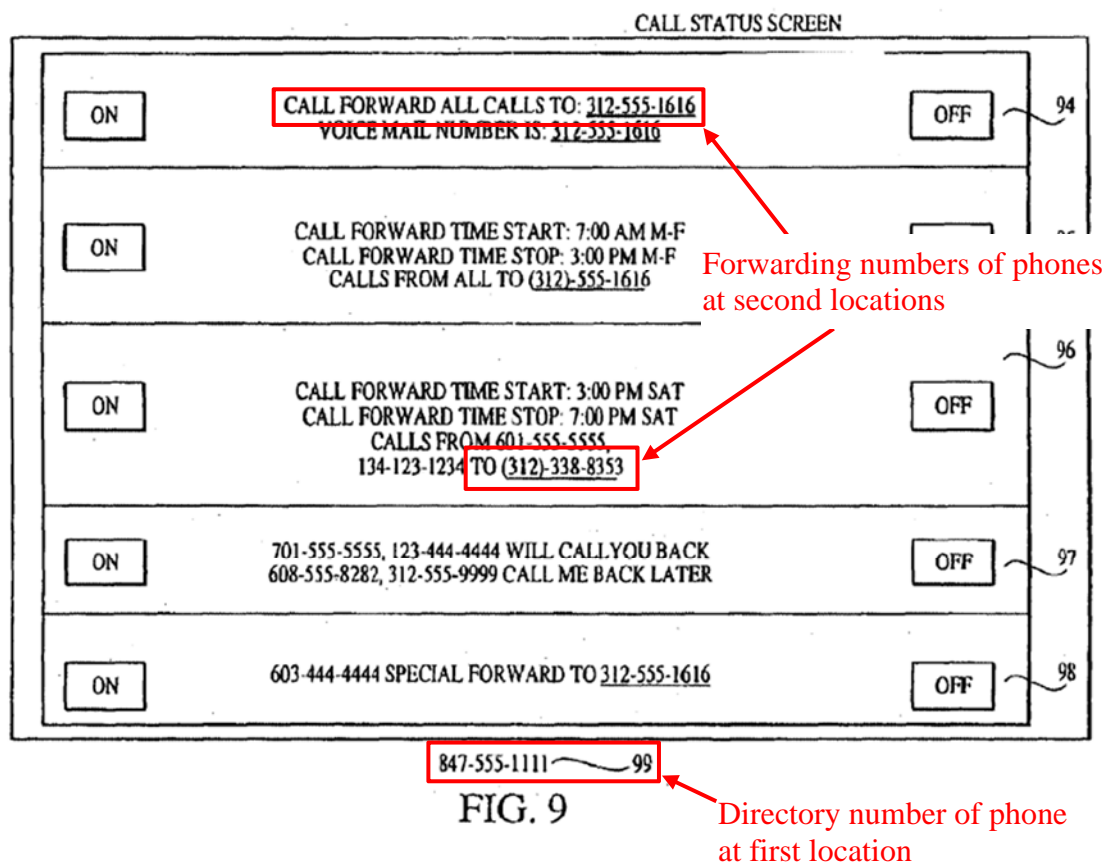
FIG. 1

EX1004, FIG. 1 (annotated); EX1003, ¶85. FIG. 2 of Adams shows that both a subscriber phone and a forwarding number phone can be connected to the telephonic network but at different physical locations:



EX1004, FIG. 2 (annotated); EX1003, ¶85.

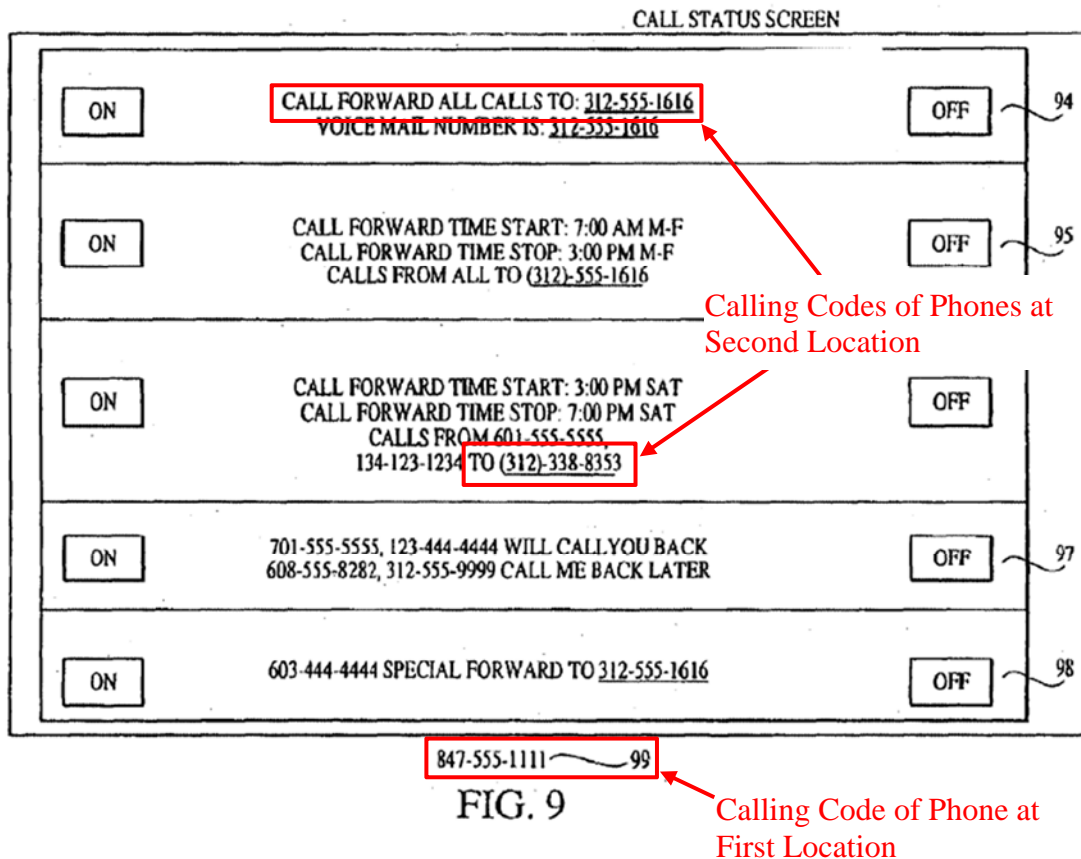
In addition, Adams' FIG. 9 shows that a subscriber can have calls routed to more than one phone, including to a directory number at a first location or to one or more forwarding numbers at second locations:



EX1004, FIG. 9 (annotated); EX1003, ¶86.

Element 5[B]

Adams' FIG. 9 shows that each telephonic station includes its own telephone number, which is a calling code:



EX1004, FIG. 9 (annotated); EX1003, ¶87. FIG. 9 indicates that the forwarding telephone numbers (calling codes) of the various phones associated with the user are indexed together by the SMS and SCP (both including indexers) with the directory telephone number (calling indicia including the calling code). *Id.*; *supra*, Ground 1, 1[B.2].

6. Claim 6

As previously discussed (*supra* Ground 1, 1[B.1]-1[B.2]), Adams' SMS (which includes an indexer) is coupled to the telephonic network through the SCP (which also includes an indexer), as shown in FIG 1:

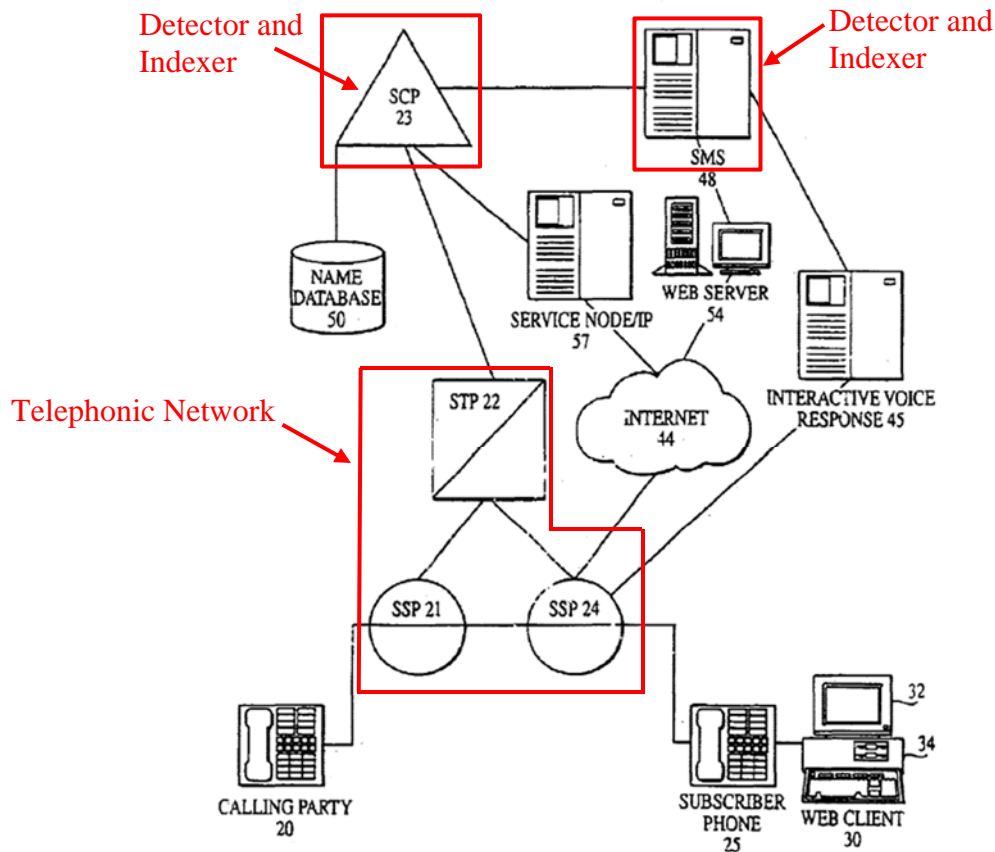


FIG. 1

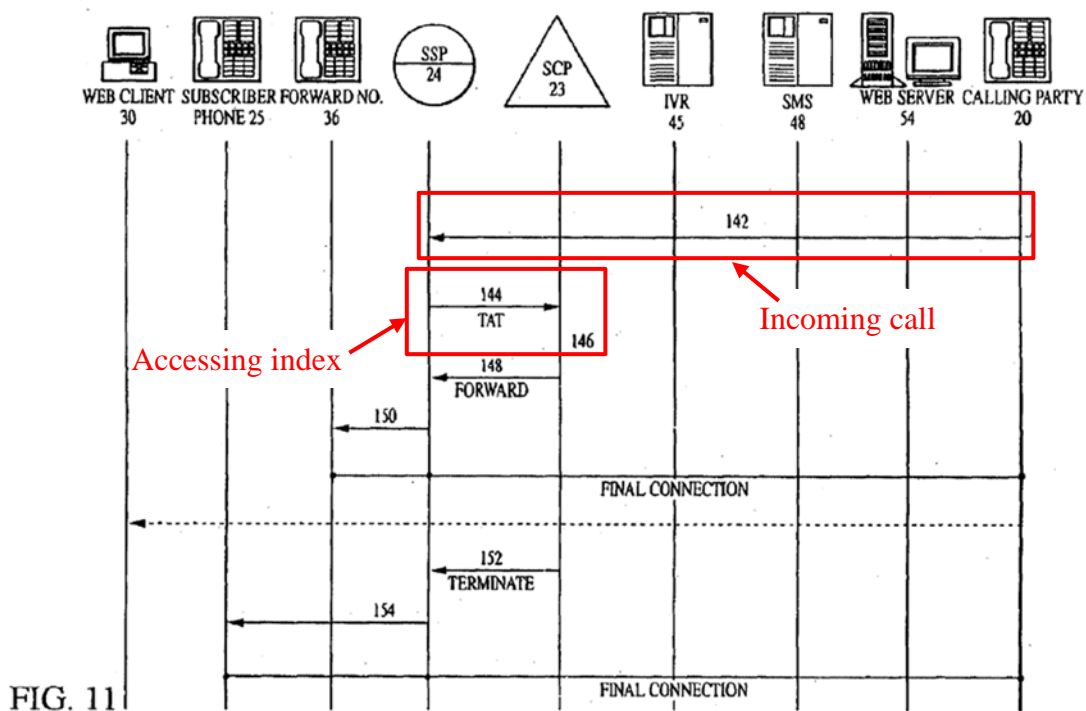
EX1004, FIG. 1 (annotated); EX1003, ¶88. The SMS stores updated call forwarding service data and transmits the updated call forwarding service data to the SCP. EX1004, 18:5-9. The SCP stores the updated call forwarding service data for implementing the call forwarding service in response to incoming calls to the subscriber's telephone number. *Id.* The data stored at the SMS is therefore duplicated at the SCP. *Id.*

The SCP processes telephone calls in a PSTN. EX1004, 9:37-42. The SCP has a database (index) of call forwarding service data corresponding to a telephone number of the subscriber. *Id.* The SCP processes incoming calls to the

subscriber's telephone number in accordance with call forwarding service data.

EX1004, 6:44-49. In response to an incoming telephone call, the SCP compares the called party's telephone number to a list of subscribers in the database, and based on the information for the subscriber in the database (index), determines the forwarding instructions including whether the Flexible Call Forwarding is on or off and the forward-to telephone number. EX1004, 20:1-21:56; EX1003, ¶89.

In more detail, Adams FIG. 11 is a call flow diagram depicting an example of Flexible Call Forwarding in response to an incoming telephone call:



EX1004, FIG. 11 (annotated), 20:1-3; EX1003, ¶90. The SCP includes a database of call forwarding service data (values representative of selection) that corresponds

to the telephone number of a subscriber (calling indicia). EX1004, 5:47-50. A calling party places a call to the telephone number of the subscriber phone, and the call proceeds to an SSP. EX1004, 20:3-5. The SCP receives a Terminating Attempt Trigger (TAT) from the SSP. EX1004, 20:5-8. The data corresponding to the TAT includes a called party identification number and a calling party identification number. EX1004, 20:15-18. After receiving the TAT, the SCP determines whether Flexible Call Forwarding is ON or OFF for the subscriber. EX1004, 20:33-37. The SCP accesses a scheduler table to execute call forwarding. EX1004, 21:1-3. The table stores a telephone number corresponding to the various activation periods of Flexible Call Forwarding. EX1004, 21:9-12. The SCP 23 instructs the SSP 24 to forward the call to the designated phone number 36. *Id.*, 21:38-40. The call is then routed accordingly. *Id.*, 21:40-41.

Adams' FIG. 9 shows an exemplary web page that displays summary information from a weekly schedule, including a basic call forwarding function in which calls are forwarded to a forwarding telephone number:

CALL STATUS SCREEN

ON	CALL FORWARD ALL CALLS TO: <u>312-555-1616</u> VOICE MAIL NUMBER IS: <u>312-555-1616</u>	OFF	94
ON	CALL FORWARD TIME START: 7:00 AM M-F CALL FORWARD TIME STOP: 3:00 PM M-F CALLS FROM ALL <u>TO (312)-555-1616</u>	OFF	95
ON	CALL FORWARD TIME START: 3:00 PM SAT CALL FORWARD TIME STOP: 7:00 PM SAT CALLS FROM <u>601-555-5555</u> <u>134-123-1234</u> TO <u>(312)-338-8353</u>	OFF	96
ON	701-555-5555, 123-444-4444 WILL CALL YOU BACK 608-555-8282, 312-555-9999 CALL ME BACK LATER	OFF	97
ON	603-444-4444 SPECIAL FORWARD TO <u>312-555-1616</u>	OFF	98

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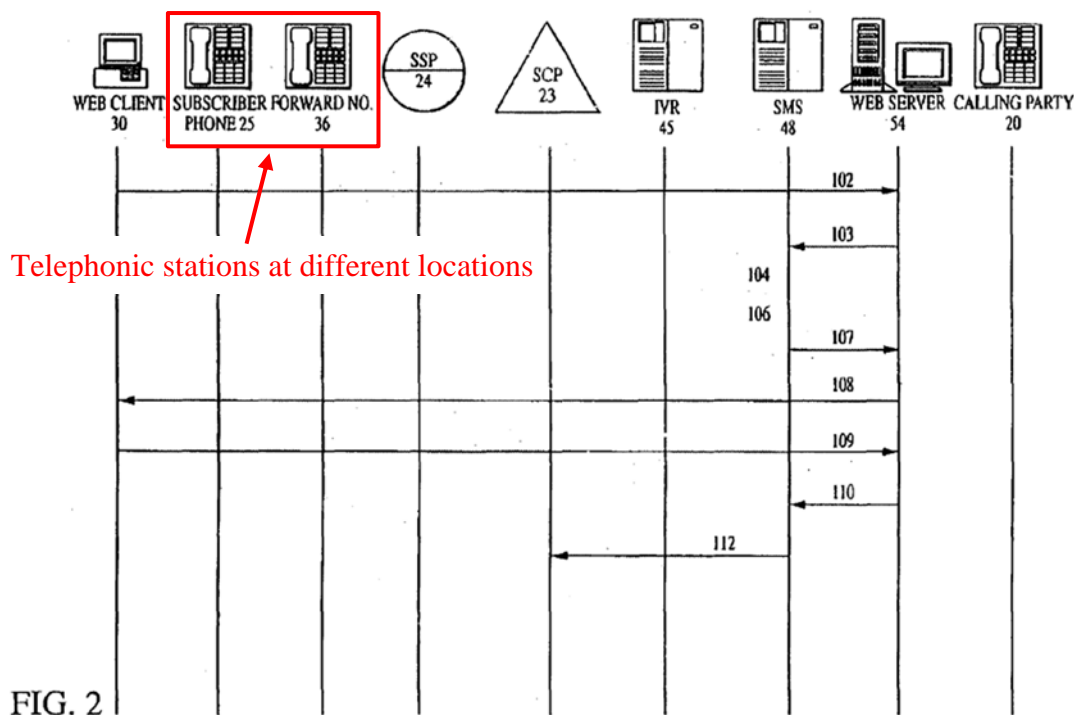
FIG. 9

EX1004, FIG. 9 (annotated), 18:31-34; EX1003, ¶91. FIG. 9 shows whether call forwarding is ON or OFF for the subscriber, and to which telephone numbers to forward incoming calls. *Id.*

Therefore, the indexer at the SMS and the indexer at the SCP is coupled to the telephonic network. EX1003, ¶92. The index embodied in a database at the SCP is accessible via the telephonic network to route an incoming call. *Id.*

7. Claim 7**Element 7[A]**

Adams discloses that users are often interested in altering some call services (e.g., call forwarding) when they are away from their business telephone and PC. EX1004, 2:37-40. Adams' FIG. 2 shows a subscriber phone 25 (normally-called location having a normally-called telephonic station) and a phone associated with a forwarding number 36:



EX1004, FIG. 2 (annotated); EX1003, ¶93. A calling party 20 places a call to the telephone number of the subscriber phone 25. EX1004, 20:3-5.

Adams' FIG. 17 shows a telephone number associated with a telephonic

station at each of the normally-called locations:

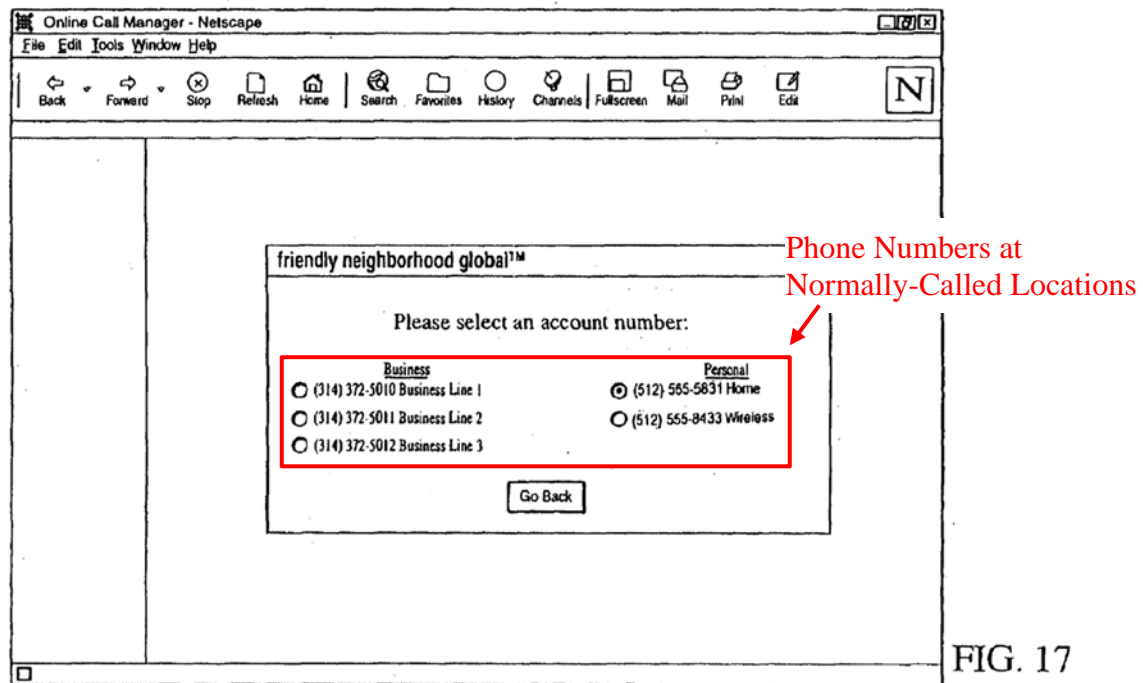


FIG. 17

EX1004, 24:16-17; 24:46-50, FIG. 17 (annotated); EX1003, ¶94.

Element 7[B]

Adams' FIG. 9 indicates that a directory number (a number for a normally-called location) is indexed together with forwarding numbers (values representative of selection):

CALL STATUS SCREEN

<input type="checkbox"/> ON	CALL FORWARD ALL CALLS TO: 312-555-1616 VOICE MAIL NUMBER IS: 312-555-1616	<input type="checkbox"/> OFF	94
<input type="checkbox"/> ON	CALL FORWARD TIME START: 7:00 AM M-F CALL FORWARD TIME STOP: 3:00 PM M-F CALLS FROM ALL TO (312)-555-1616	<input type="checkbox"/> OFF	95
<input type="checkbox"/> ON	CALL FORWARD TIME START: 3:00 PM SAT CALL FORWARD TIME STOP: 7:00 PM SAT CALLS FROM 601-555-5555 134-123-1234 TO (312)-338-8353	<input type="checkbox"/> OFF	96
<input type="checkbox"/> ON	701-555-5555, 123-444-4444 WILL CALL YOU BACK 608-555-8282, 312-555-9999 CALL ME BACK LATER	<input type="checkbox"/> OFF	97
<input type="checkbox"/> ON	603-444-4444 SPECIAL FORWARD TO 312-555-1616	<input type="checkbox"/> OFF	98

847-555-1111 ~ 99

FIG. 9

Values Representative of Selection

Phone number at Normally Called Location

EX1004, FIG. 9 (annotated); EX1003, ¶95. The directory number 99 at the bottom of the screen is the telephone number of the subscriber using the service. EX1004, 18:34-36.

FIG. 18 (below) shows a PCM Home Page for a selected directory phone number (normally-called number at the normally-called location). EX1004, 24:46-50. The services depicted in FIG. 18 include an Incoming Call Manager, which indexes the directory number (normally-called number) with the forwarding number (values representative of selection). EX1004, 24:65-67.

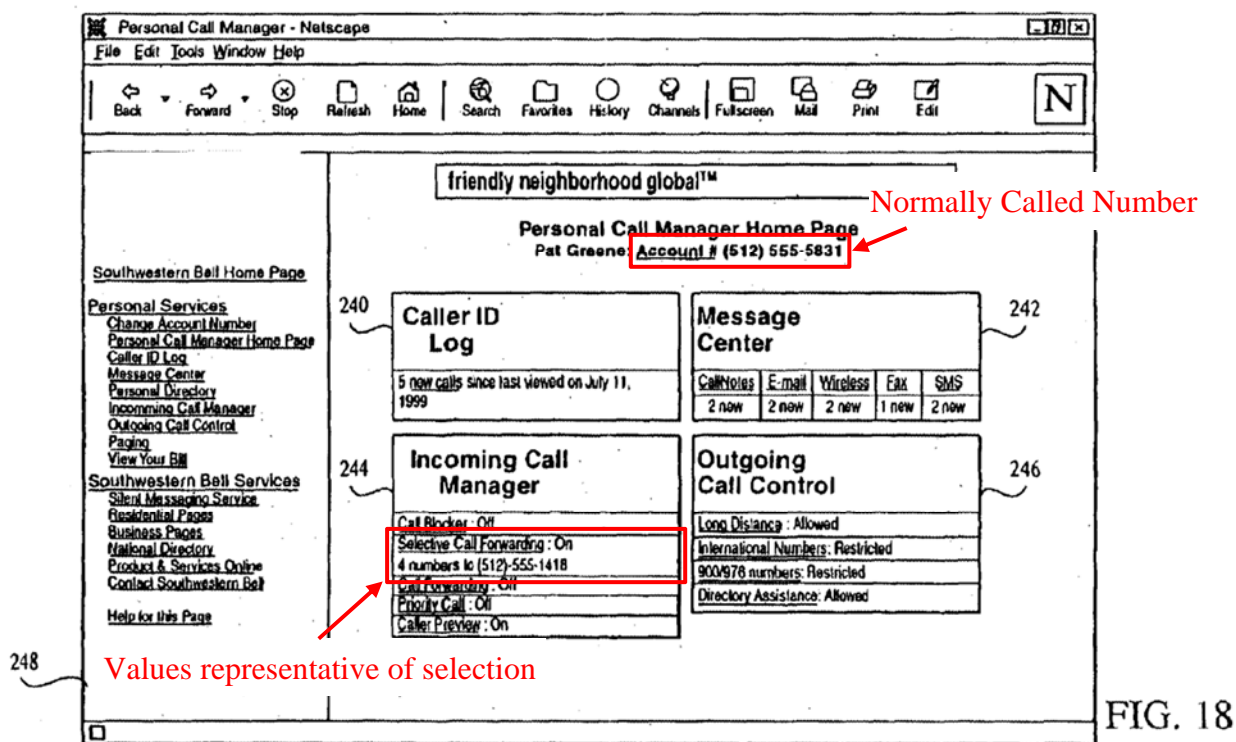


FIG. 18

EX1004, FIG. 18 (annotated); EX1003, ¶96. As shown in FIG. 18 above, the value representative of the normally-called location is the subscriber's account phone number. *Id.* As previously discussed (*supra* Ground 1, 1[B.2]), this number is indexed with the forwarding on/off selection and corresponding forwarding number (values representative of selection). EX1004, 6:14-16, 7:58-67, 8:48-9:8, 18:1-9; EX1003, ¶96.

8. Claim 8

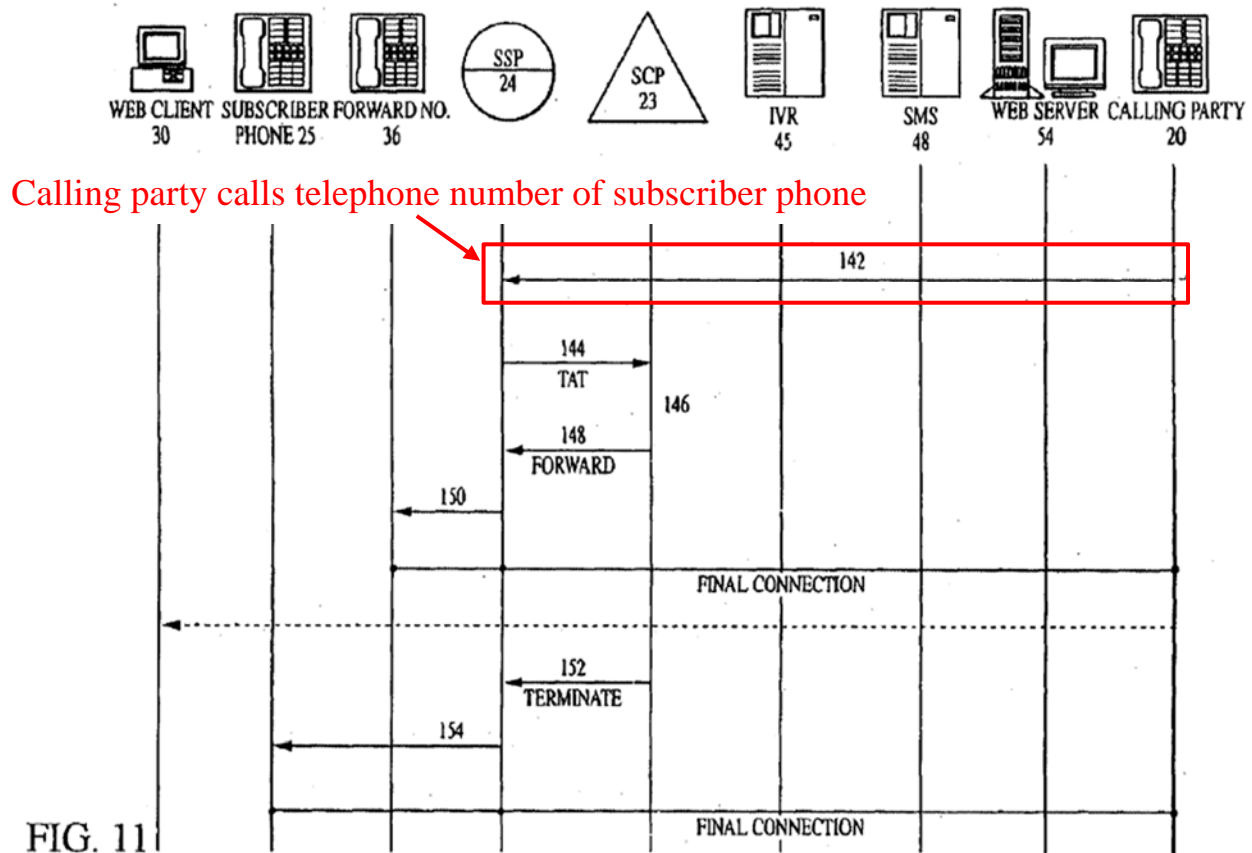
As previously discussed (*supra* Ground 1, 7[B]), Adams discloses that the value representative of the normally-called location is the subscriber's account phone number (normally-called-location dialing code). EX1004, 24:46-50, 24:65-

67, FIGS. 9, 18. This number is indexed with the forwarding on/off selections and corresponding forwarding number (values representative of selection). EX1004, 6:14-17, 7:58-67, 8:48-9:8, 18:1-9; EX1003, ¶97.

9. Claim 9

Element 9[A]

As previously discussed (*supra* Ground 1, claims 6-8), Adams describes that a calling party places a call to the telephone number (normally-called location dialing code) of the subscriber phone. EX1004, 20:3-5, FIG. 11. As shown in FIG. 11, to begin the call routing process, at step 142, calling party 20 places a call to the telephone number of the subscriber phone 25:



EX1004, FIG. 11 (annotated), 20:3-5; EX1003, ¶98.

Element 9[B]

As previously discussed (*supra* Ground 1, claims 6-7), Adams' SCP processes telephone calls in a PSTN. EX1004, 9:37-42. The SCP has a database (index) of call forwarding service data corresponding to a telephone number of the subscriber. EX1004, 9:37-42. The SCP processes incoming calls to the subscriber's telephone number in accordance with call forwarding service data. EX1004, 6:44-49. In response to an incoming telephone call, the SCP compares

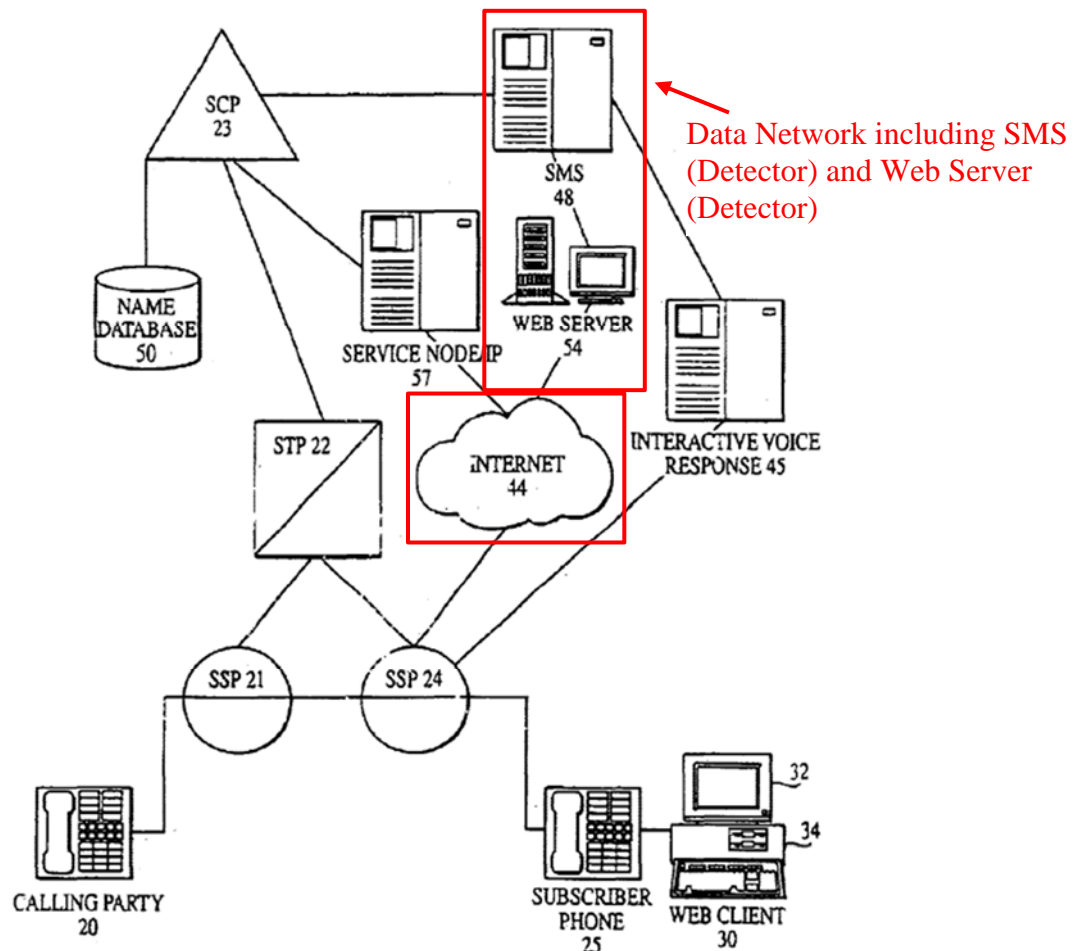
the called party's telephone number to a list of subscribers in the database, and based on the information for the subscriber in the database (index), determines the forwarding instructions including whether the Flexible Call Forwarding is on or off and the forward-to telephone number. EX1004, 20:1-21:56; EX1003, ¶99.

10. Claim 10

As previously discussed (*supra* Ground 1, 1[B.1]-1[B.2]), Adams' SMS (including a detector and indexer) stores updated call forwarding service data. EX1004, 7:65-66, 15:62-64. When a subscriber interacts with the web page to add call forwarding information, the SMS receives the call forwarding information, stores it, and also sends that data to the SCP (also including a detector and indexer). EX1004, 18:1-9; EX1003, ¶100. The data stored at the SMS is therefore duplicated by the data stored at the SCP (indexer embodied thereat). *Id.*

11. Claim 12

Adams' data network includes a Web client 30, a Web server 54 and a service management system (SMS) 48, connectable through the Internet 44 (public network portion), as shown in FIG. 1:



EX1004, FIG. 1 (annotated), 13:41-56, 22:28-38; EX1003, ¶101.

12. Claim 13

Element 13[P.1]

To the extent the preamble is treated as a limitation, Adam discloses this element of the preamble as detailed above. *Supra*, Ground 1, 1[P.1]; EX1003, ¶102.

Element 13[P.2]

Also to the extent the preamble is treated as a limitation, Adams discloses this element of the preamble as detailed above. *Supra*, Ground 1, 1[P.2]; EX1003, ¶103.

Element 13[A]

Adams discloses the claimed detecting step as detailed above. *Supra*, Ground 1, 1[A.1]-1[A.2]; EX1003, ¶104.

Element 13[B]

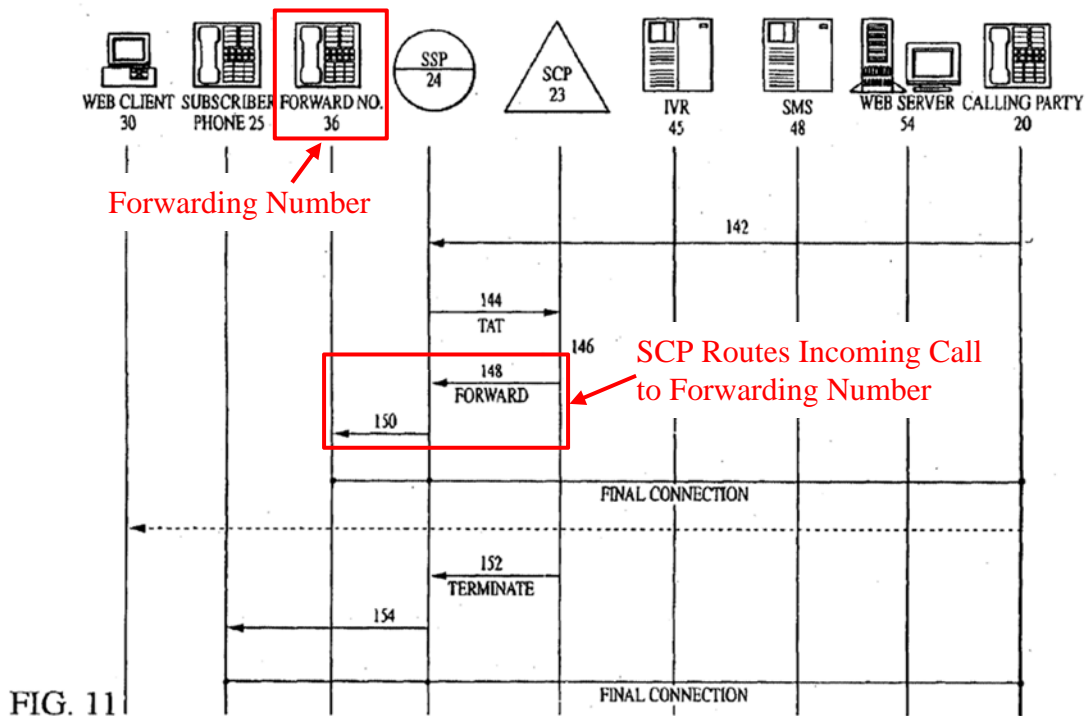
Adams discloses the claimed forming step as detailed above. *Supra*, Ground 1, 1[B.1]-1[B.2]; EX1003, ¶105.

Element 13[C]

Adams discloses the claimed accessing step as detailed above. *Supra*, Ground 1, claim 6; EX1003, ¶106.

Element 13[D]

With reference to FIG. 11 (below), Adams' SCP instructs the SSP to forward the call to the forwarding number 36 and the call is then routed. EX1004, 21:27-28, 21:38-41.



EX1004, FIG. 11 (annotated); EX1003, ¶107. To instruct the SSP to forward a call, the SCP sends a forward call message to the SSP. EX1004, 21:43-50. The SSP then completes the connection between the calling party and the forwarding number 36, resulting in a final connection between the two. *Id.*

13. Claim 14

Element 14[A]

Adams discloses this element of claim 14 as detailed above. *Supra*, Ground 1, 2[A]; EX1003, ¶108.

Element 14[B]

Adams discloses this additional element of claim 14 as detailed above.

Supra, Ground 1, 1[A.1]-1[A.2], 2[B]; EX1003, ¶109.

14. Claim 15

Adams discloses claim 15 as detailed above. *Supra*, Ground 1, 1[A.2], claims 3-4; EX1003, ¶110.

15. Claim 16

Element 16[A]

Adams discloses this element of claim 16 as detailed above. *Supra*, Ground 1, 7[A]; EX1003, ¶111.

Element 16[B]

Adams discloses this element of claim 16 as detailed above. *Supra*, Ground 1, 7[B]; EX1003, ¶112.

16. Claim 17

Adams discloses claim 17 as detailed above. *Supra*, Ground 1, claim 6; EX1003, ¶113.

17. Claim 18

Adams discloses claim 18 as detailed above. *Supra*, Ground 1, 7[B], claim 8; EX1003, ¶114.

18. Claim 19

Element 19[A]

Adams discloses this element of claim 19 as detailed above. *Supra*, Ground 1, 1[P.1], 5[A]; EX1003, ¶115.

Element 19[B]

Adams discloses this additional element of claim 19 as detailed above. *Supra*, Ground 1, 5[B]; EX1003, ¶116.

19. Claim 20

Adams discloses claim 20 as detailed above. *Supra*, Ground 1, 1[B.1]-1[B.2], claims 6, 10; EX1003, ¶117.

B. GROUND 2—Adams in view of Chestnut Renders Obvious Claims 1-20

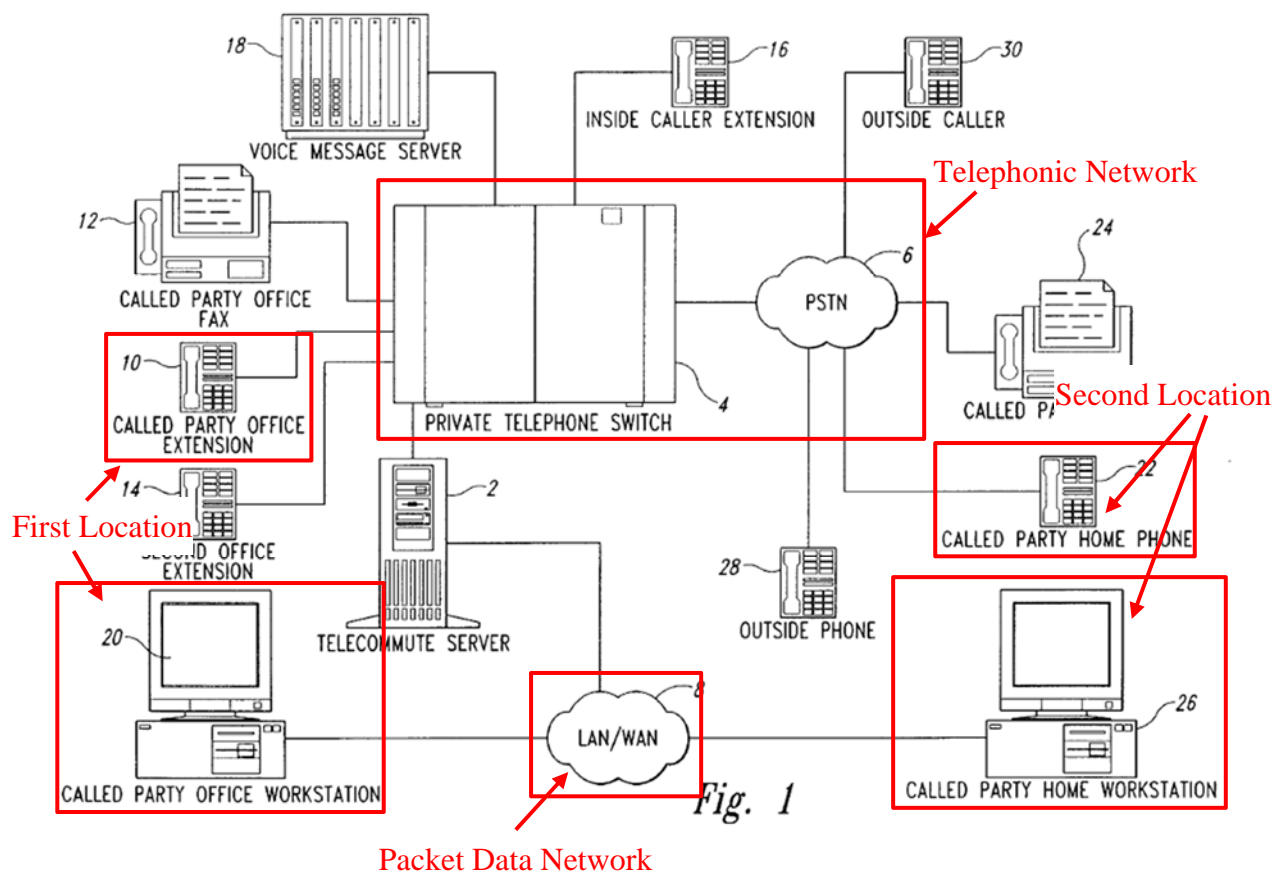
1. Claim 1

Element 1[P.1]

To the extent the preamble is treated as a limitation, Adams' communication system includes a packet data network and a telephonic network through which the subscriber communicates using a subscriber phone and a forward number phone. EX1004, 5:21-37, 6:18-32, FIG. 1; EX1003, ¶126; *supra* Ground 1, 1[P.1].

To the extent that Adams were considered to not expressly disclose that a user selectably communicates at any of a first location and at least a second

location through a packet data network, similar prior art techniques for call forwarding provided this feature. EX1003, ¶127. In the same field of endeavor, Chestnut describes that a user can selectably communicate using a packet data network and/or a telephonic network from either a first location or a second location, as shown in FIG. 1:



EX1005, FIG. 1 (annotated), 4:36-5:2; EX1003, ¶127. Chestnut describes “a telecommunications management system which closely integrates a company’s LAN with its telephone network and makes the same CTI application functions

available to an employee whether they are in the office or working from a remote location.” EX1005, 2:14-24; EX1003, ¶¶56-61.

A POSITA would have recognized the predictable benefits of applying Chestnut’s suggestion to Adams’ system to integrate a company’s LAN with the telephone network and to control call forwarding based on the computer terminal used to log on to the company’s LAN. EX1005, 2:25-30; EX1003, ¶¶118-125, 128. The evidence here demonstrates that the predictable application of Chestnut’s suggestion to Adams’ system would have beneficially produced a system where a computer terminal, such as an office workstation, is connected to the web server being embodied at a company’s LAN, and the SCP, SMS, and web server are implemented to additionally provide the functionalities of Chestnut’s telecommute server. *Id.* Implementing Chestnut’s suggestion into Adams’ system would have predictably resulted in a user having phones connected to a telephonic network at a first location (e.g., called party office extension 10) and a second location (e.g., called party home phone 22), and having computers directly or indirectly coupled to a computer network (packet data network) at the first location (e.g., called party office workstation 20) and at the second location (e.g., called party home workstation 26). *Id.* As depicted below, the evidence here demonstrates an example of the predictable combination of Adam’s system with Chestnut’s suggestion showing workstations at different locations with an office workstation

at the first location connected to the web server via the corporate LAN:

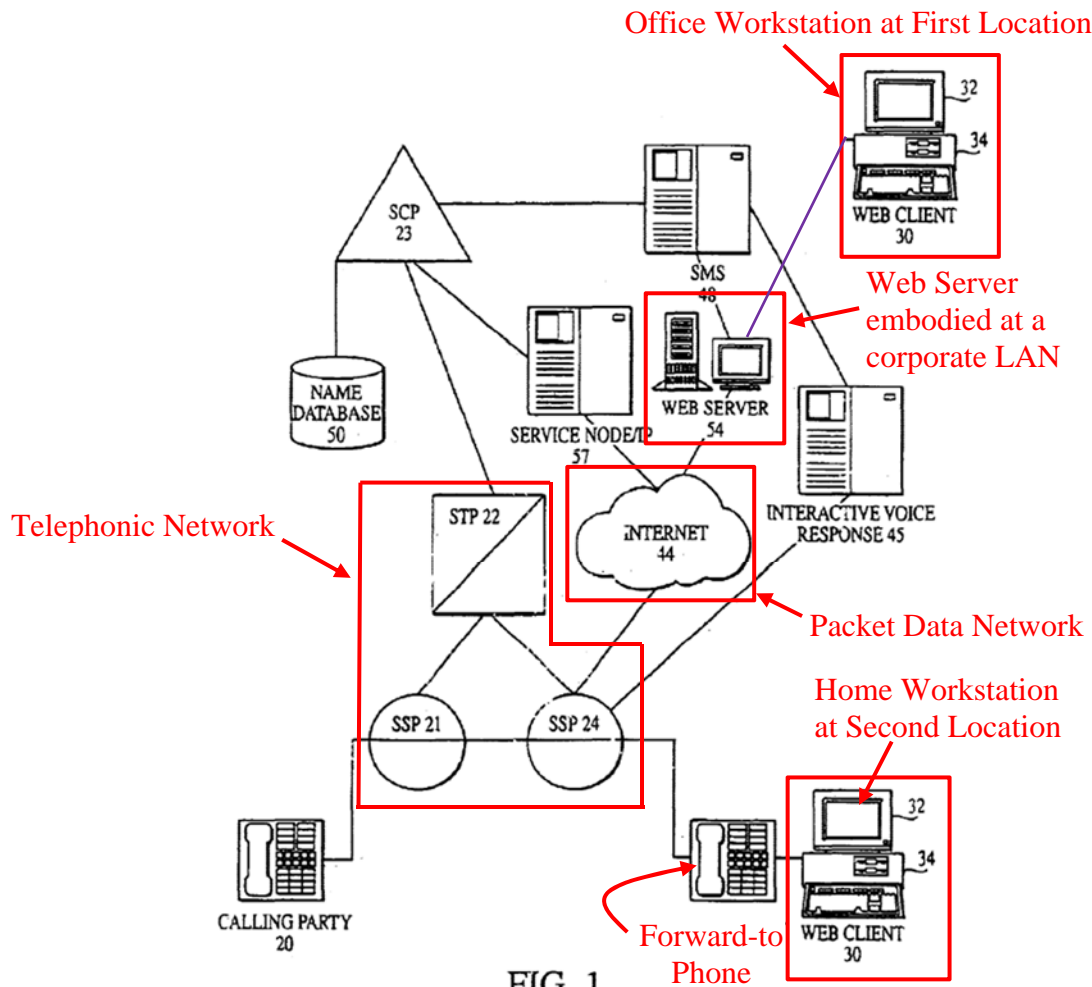


FIG. 1

EX1003, ¶¶119, 128 (annotating EX1004, FIG. 1 and citing EX1005, 4:36-5:2).

The evidence here also demonstrates another example of the predictable combination of Adam's system with Chestnut's suggestion of the home workstation being connected directly to the Internet, as depicted below:

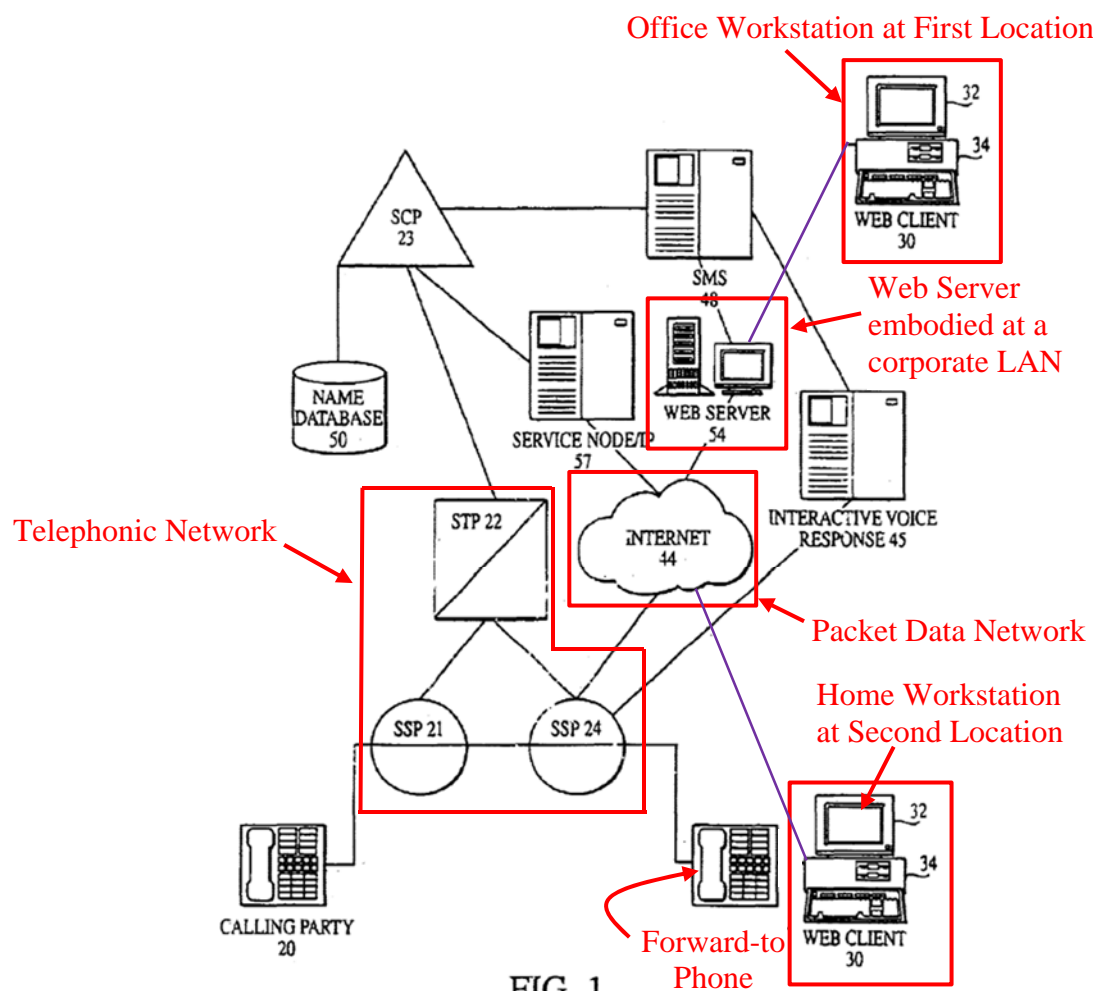


FIG. 1

EX1003, ¶128 (annotating EX1004, FIG. 1 and citing EX1005, 4:36-5:2, FIG. 1).

Consistent with the combination of Adams and Chestnut, the web server would receive a network identifier for the device with which the user is logged on to the LAN and send the network identifier as part of the call forwarding instructions to the SMS which sends it to the SCP. EX1004, 17:65-18:9; EX1005, 4:48-5:2, 6:13-24, 6:33-38; EX1003, ¶120. The SMS and SCP would index call forwarding instructions including the network identifier with the subscriber's

business telephone number. *Id.*; EX1004, 6:14-16, 8:48-9:8, FIG. 17. The SCP would select the telephone number to which incoming calls to the subscriber's business telephone number should be forwarded based on the index, which associates a forwarding telephone number, such as the number for subscriber's home phone, with a network logon device, such as the subscriber's home workstation. *Id.*; EX1004, 6:44-47, 9:37-42, 20:1-21:56.

The evidence here shows that a POSITA would have been prompted to implement Chestnut's suggestion into Adams to achieve this advantageous feature, and that doing so would have been achieved with the high degree of predictability and reasonable expectation of success. EX1003, ¶121. According to the evidence, multiple reasons (articulated below) would have prompted a POSITA to implement Chestnut's suggestion in Adams. EX1003, ¶122.

First, a POSITA would have been motivated to implement Chestnut's suggestion into Adams to achieve the known benefits of integrating a company's LAN with the telephone network, including extending the functionality of the office telephone system to the phone that is available at the employee's remote location. EX1003, ¶123; EX1005, 2:25-30. Adams explains that "Internet based systems operate exclusively from the conventional IVR systems, i.e., the two systems cannot coexist, [and] customers must select either the Internet interface or the IVR interface." EX1004, 2:29-33. "Consequently, a customer who has selected

the Internet interface, and who is without a PC and/or Internet access, is not able to make desired changes to his or her services through an IVR.” *Id.*, 2:33-36. “The inability to implement desired changes is especially troublesome considering that users are often interested in altering some call services...when they are away from their home or business telephone and PC.” EX1004, 2:36-40.

Chestnut recognizes that “the lack of integration between a company’s telephone system and LAN means that an employee has to...manually set call forwarding, and then remotely log on to the company’s LAN.” EX1005, 2:1-5. Further, “[a]fter logging off the LAN, the employee must remember...to discontinue call forwarding.” EX1005, 2:9-11. A POSITA would have recognized that implementing Chestnut’s suggestion into Adams would have provided a system that automatically forwards calls based on the computer terminal used to log on to the company’s LAN without requiring the employee to manually set and discontinue call forwarding before logging on and after logging off the LAN. EX1003, ¶124; EX1005, 2:34-44, 4:48-5:2, 6:13-24, 6:33-38.

Second, the evidence here also shows that a POSITA would have been motivated to implement Chestnut’s suggested improvement into Adams’ system because doing so would have been merely the application of a known technique (e.g., Chestnut’s suggestion to integrate a company’s LAN with the telephone network and to control call forwarding based on the computer terminal used to log

on to the company's LAN) to a known system (Adams' call forwarding system) ready for improvement to yield predictable results. EX1003, ¶125. The law is straightforward: "when a patent 'simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement, the combination is obvious.'" *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007). Here, both Adams and Chestnut describe call forwarding systems, and a POSITA would have recognized that Chestnut's suggestions would have been readily and beneficially applied to Adams. EX1004, 1:17-19; EX1005, 1:4-9; EX1003, ¶125. A POSITA would have furthermore had a reasonable expectation of success in implementing Chestnut's suggestion into the Adam's system as they both are directed to the same aspect of the same technology. *Id.* A POSITA would have recognized that applying Chestnut's teachings to Adams' system would have led to predictable results without significantly altering or hindering the functions performed by Adams' system. *Id.*

Element 1[P.2]

To the extent the preamble is treated as a limitation, Adams' apparatus facilitates routing of a call to the user placed by a calling party by way of the telephonic network. EX1004, 20:1-21:56; EX1003, ¶129; *supra*, Ground 1, 1[P.2]. For example, Adams' SMS transmits and receives information to and from the

SCP. EX1004, 13:47-56 The SMS maintains and distributes subscriber specific data for the Flexible Call Forwarding service. *Id.*

Additionally, Chestnut controls call forwarding based upon user activity on an associated computer terminal, thereby extending the functionality of the office telephone system to whatever phone the employee has available at a remote location. EX1005, 2:25-30. For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in additionally functionality to control call forwarding based on the computer terminal used to log on to the company's LAN. EX1005, 2:25-30; EX1003, ¶130.

Element 1[A.1]

The Adams-Chestnut combination provides the claimed detector through Adams' disclosure as detailed above. *Supra*, Ground 1, 1[A.1]; EX1003, ¶131. Adams' detector is modified to include additionally functionality to control call forwarding based on the computer terminal used to log on to the company's LAN, as suggested by Chestnut and described below. *Id.*

Element 1[A.2]

As previously stated (*supra* Ground 1, Claim 1[A.2]), Adams' Web server, SMS, and SCP receive call forwarding instructions (indications) across the Internet

of which location calls directed to the subscriber should be forwarded. EX1004, 6:33-48, 13:40-56; EX1003, ¶132.

To the extent that Adams' call forwarding instructions were considered to not expressly disclose indications of at which of the first and at least second locations at which the user selects to communicate by way of the first telephonic network, similar prior art techniques for call forwarding provided this feature. EX1003, ¶133. Similar to Adams, Chestnut describes that "forwarding preferences may be entered by the called party when he/she logs onto or off of the computer network" and that Chestnut's server "can also forward incoming calls based upon other criteria including day or date, time of day, the identity of the caller, or any preprogrammed set of rules." EX1005, 5:13-25, 6:39-42. Additionally, Chestnut's server checks the computer network (packet data network) to see if the called party is logged on. EX1005, 4:51-57. If the called party is logged on, the call is forwarded to the telephone extension associated with the device the called party has used to log onto the computer network. *Id.* The telephone number to which incoming calls should be forwarded is selected based upon a record stored in a memory which associates a forwarding telephone number, such as the number for the called party home phone, with an identifier of the network logon device, such as the called party home workstation. EX1005, 4:64-5:2, 6:13-24, 6:33-38.

For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in the Web server (including a detector), the SMS (including a detector), and the SCP (including a detector) receiving the identifier of the computer where the user is logged into (indications of at which of the first and at least second locations at which the user selects to communicate by way of the first telephonic network) to forward incoming calls for the user. EX1003, ¶134.

Element 1[B.1]

The Adams-Chestnut combination provides the claimed indexer through Adams' disclosure as detailed above. *Supra*, Ground 1, 1[B.1]; EX1003, ¶135. Adams' indexer is modified to include additionally functionality to control call forwarding based on the computer terminal used to log on to the company's LAN, as suggested by Chestnut and described below. *Id.*

Element 1[B.2]

As previously stated (*supra* Ground 1, 1[B.2]), each of Adams' SMS and SCP includes an indexer that is coupled to the detector and that forms an index by indexing forward-to numbers and the on/off selections (values representative of selection) together with the subscriber's account phone number (calling indicia). EX1004, 7:65-66, 15:62-64, 18:1-9, FIGS. 9, 17-18; EX1003, ¶136.

To the extent that Adams' disclosure of indexing forward-to numbers and the on/off selections together with the subscriber's account phone number were considered to not expressly disclose indexing together values representative of selection made by the user of the selected one of the first and at least second locations together with calling indicia used to route the call to the selected one of the first location and the at least the second location, similar prior art techniques for call forwarding provided this feature. EX1003, ¶¶137-138. For instance, Chestnut describes an index storing an office extension (calling indicia) with an identity of the party, a list (index) including the identity of the party associated with the identity of the current network logon device (values representative of selection), and a list (index) including identities of logon devices indexed with telephone numbers (also values representative of selection). *Id.*; EX1005, 4:64-5:2, 6:13-24, 6:33-38. Similar to Adams, Chestnut also discloses that "[o]ther factors including time of day, day of the week, date, and/or the identity of the calling party may be used to determine the forwarding number by providing additional indexing criteria." EX1004, 6:39-42.

For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in the databases at the SMS and SCP including an index storing an office extension (calling indicia) with an identity of the party, a list

(index) including the identity of the party associated with the identity of the current network logon device (values representative of selection), and a list (index) including identities of logon devices indexed with telephone numbers (also values representative of selection) to control call forwarding based on the computer terminal used to log on to the company's LAN, as suggested by Chestnut. EX1005, 2:25-30, 4:58-5:2, 6:13-24, 6:33-38; EX1003, ¶139. The SCP would select the telephone number to which incoming calls to the subscriber's business telephone number should be forwarded based on the index, which associates a forwarding telephone number, such as the number for subscriber's home phone, with a network logon device, such as the subscriber's home workstation. *Id.*; EX1004, 6:44-47, 9:37-42, 20:1-21:56; EX1005, 4:48-5:2.

2. Claim 2

Element 2[A]

The Adams-Chestnut combination provides this element of claim 2 as detailed above. *Supra*, Ground 1, 2[A], Ground 2, 1[P.1]; EX1003, ¶140. For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in a user having phones connected to a telephonic network at a first location (e.g., called party office extension 10) and a second location (e.g., called party home phone 22), and having computers directly or indirectly coupled to a

computer network (packet data network) at the first location (e.g., called party office workstation 20) and the second location (e.g., called party home workstation 26). EX1005, 4:36-5:2, FIG. 1; EX1003, ¶140.

Element 2[B]

As previously discussed (*supra* Ground 1, 2[B]), Adams' Web server, SMS, and SCP receive call forwarding instructions (indications) across the Internet of which location calls directed to the subscriber should be forwarded. EX1004, 6:33-48, 13:40-56; EX1003, ¶141.

Also as previously discussed (*supra* Ground 2, 1[A.2]), Chestnut's server checks the computer network (packet data network) to see if the called party is logged on. EX1005, 4:51-57. For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in the Web server (including a detector), the SMS (including a detector), and the SCP (including a detector) receiving the identifier of the computer where the user is logged into (indications of at which of the first and at least second locations at which the user selects to communicate by way of the first telephonic network) to forward incoming calls for the user. EX1003, ¶142.

3. Claim 3

As previously stated (*supra* Ground 1, Claim 3), Adams' SMS queries the subscriber for an account number, which indicates the subscriber's phone number. EX1004, 16:3-10, 24:16-17, 24:46-50; EX1003, ¶143. The Web server, SMS, and SCP receive an indication of the subscriber's account phone number, the call forwarding on/off selection, and corresponding forwarding number, which are stored (indexed) together by the SMS and SCP in a database (index). EX1004, 5:48-50, 17:65-18:9, FIGS. 9, 17-18.

Also as previously discussed (*supra* Ground 2, 1[B.2]), Chestnut describes an index storing an office extension (calling indicia) with an identity of the party, a list (index) including the identity of the party associated with the identity of the current network logon device (values representative of selection), and a list (index) including identities of logon devices indexed with telephone numbers (also values representative of selection). EX1005, 4:58-5:2, 6:13-24, 6:33-42; EX1003, ¶144.

As previously discussed (*supra* Ground 2, 1[A.2]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in the Web server (including a detector), the SMS (including a detector), and the SCP (including a detector) receiving the identifier of the computer where the user is logged into (indications of at which of the first and at least second locations at which the user selects to communicate by way of the first telephonic network) to forward

incoming calls for the user. EX1005, 4:51-5:2, 6:13-24, 6:33-42; EX1003, ¶145.

Additionally, the databases of the SMS and SCP would each include an index storing an office extension (calling indicia) with an identity of the party, a list (index) including the identity of the party associated with the identity of the current network logon device (values representative of selection), and a list (index) including identities of logon devices indexed with telephone numbers (also values representative of selection) to control call forwarding based on the computer terminal used to log on to the company's LAN, as suggested by Chestnut. *Id.*; EX1005, 2:25-30.

4. Claim 4

As previously discussed (*supra* Ground 1, claims 3-4), Adams' Web server, SMS, and SCP receive from the Web client a subscriber's account phone number, the call forwarding on/off selection, and corresponding forwarding number, which are stored (indexed) together by the SMS and SCP in a database (index). EX1004, 6:11-22, 6:27-32; EX1003, ¶146.

Similar to Adams, Chestnut describes that "forwarding preferences may be entered by the called party when he/she logs onto or off of the computer network" and that Chestnut's server "can also forward incoming calls based upon other criteria including day or date, time of day, the identity of the caller, or any preprogrammed set of rules." EX1005, 5:13-25, 6:39-42. As previously discussed

(*supra* Ground 2, 1[A.2], claim 3), Chestnut's server checks the computer network (packet data network) to see if the called party is logged on. EX1005, 4:51-57; EX1003, ¶147. If the called party is logged on, the call is forwarded to the telephone extension associated with the device the called party has used to log onto the computer network. *Id.* The telephone number to which incoming calls should be forwarded is selected based upon a record stored in a memory which associates a forwarding telephone number, such as the number for the called party home phone, with an identifier of the network logon device, such as the called party home workstation. EX1005, 4:58-5:2, 6:13-24, 6:33-38.

For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in the Web server (including a detector), the SMS (including a detector), and the SCP (including a detector) receiving from the Web client a subscriber's account phone number (calling indicia), the selective call forwarding on/off selection, corresponding forwarding number, and the identifier of the computer where the user is logged into to forward incoming calls for the user. EX1003, ¶148.

5. Claim 5

Element 5[A]

The Adams-Chestnut combination provides this element of claim 5 as

detailed above. *Supra*, Ground 1, 5[A], Ground 2, 1[P.1]; EX1003, ¶149. For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in a user having phones connected to a telephonic network at a first location (e.g., called party office extension 10) and a second location (e.g., called party home phone 22), and having computers directly or indirectly coupled to a computer network (packet data network) at the first location (e.g., called party office workstation 20) and the second location (e.g., called party home workstation 26). EX1005, 4:36-5:2, FIG. 1; EX1003, ¶149.

Element 5[B]

As stated previously (*supra* Ground 1, 5[B]), Adams describes that each telephonic station includes its own telephone number (calling code), including the subscriber's directory number (calling indicia) and the forward-to numbers. EX1004, FIG. 9; EX1003, ¶150.

As previously described (*supra* Ground 2, 1[B.2]), Chestnut describes an index storing an office extension (calling indicia/code) with an identity of the party, a list (index) including the identity of the party associated with the identity of the current network logon device (values representative of selection), and a list (index) including identities of logon devices indexed with telephone numbers (also values representative of selection). EX1005, 4:58-5:2, 6:13-24, 6:33-38; EX1003,

¶151. For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in the databases of the SMS and SCP each including an index storing an office extension (calling indicia/code) with an identity of the party, a list (index) including the identity of the party associated with the identity of the current network logon device (values representative of selection), and a list (index) including identities of logon devices indexed with telephone numbers (also values representative of selection) to control call forwarding based on the computer terminal used to log on to the company's LAN, as suggested by Chestnut. *Id.*; EX1005, 2:25-30.

6. Claim 6

As previously discussed (*supra* Ground 1, claim 6), Adams' SCP processes telephone calls in a PSTN. EX1004, 9:37-42; EX1003, ¶152. The SCP has a database (index) of call forwarding service data corresponding to a telephone number of the subscriber. EX1004, 9:37-42. The SCP processes incoming calls to the subscriber's telephone number in accordance with call forwarding service data. EX1004, 6:44-49. In response to an incoming telephone call, the SCP compares the called party's telephone number to a list of subscribers in the database, and based on the information for the subscriber in the database (index), determines the

forwarding instructions including whether the Flexible Call Forwarding is on or off and the forward-to telephone number. EX1004, 20:1-21:56.

Also as previously discussed (*supra* Ground 2, 1[B.2]), Chestnut describes that a telephone call is received and the identity of the called party is determined by looking up the dialed extension in an index stored in a computer memory. EX1005, 6:9-24; EX1003, ¶153. The current called party network logon device is determined by comparing the identity of the called party with a list (index) of persons currently logged onto the computer network. *Id.* The telephone number associated with the current called party network logon device is determined by comparing the identity of the logon device with a list (index) of telephone numbers indexed by logon device stored in a memory. EX1005, 6:34-42. The telephone number to which incoming calls should be forwarded is selected based upon a record (index) stored in a memory which associates a forwarding telephone number, such as the number for called party home phone, with a network logon device, such as called party home workstation. EX1005, 4:58-5:2.

For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in the databases at the SMS and SCP including an index storing an office extension (calling indicia) with an identity of the party, a list (index) including the identity of the party associated with the identity of the current

network logon device (values representative of selection), and a list (index) including identities of logon devices indexed with telephone numbers (also values representative of selection) to control call forwarding based on the computer terminal used to log on to the company's LAN, as suggested by Chestnut. EX1005, 2:25-30, 4:58-5:2, 6:13-24, 6:33-38; EX1003, ¶154. The SCP would select the telephone number to which incoming calls to the subscriber's business telephone number should be forwarded based on the index, which associates a forwarding telephone number, such as the number for subscriber's home phone, with a network logon device, such as the subscriber's home workstation. *Id.*; EX1004, 6:44-47, 9:37-42, 20:1-21:56.

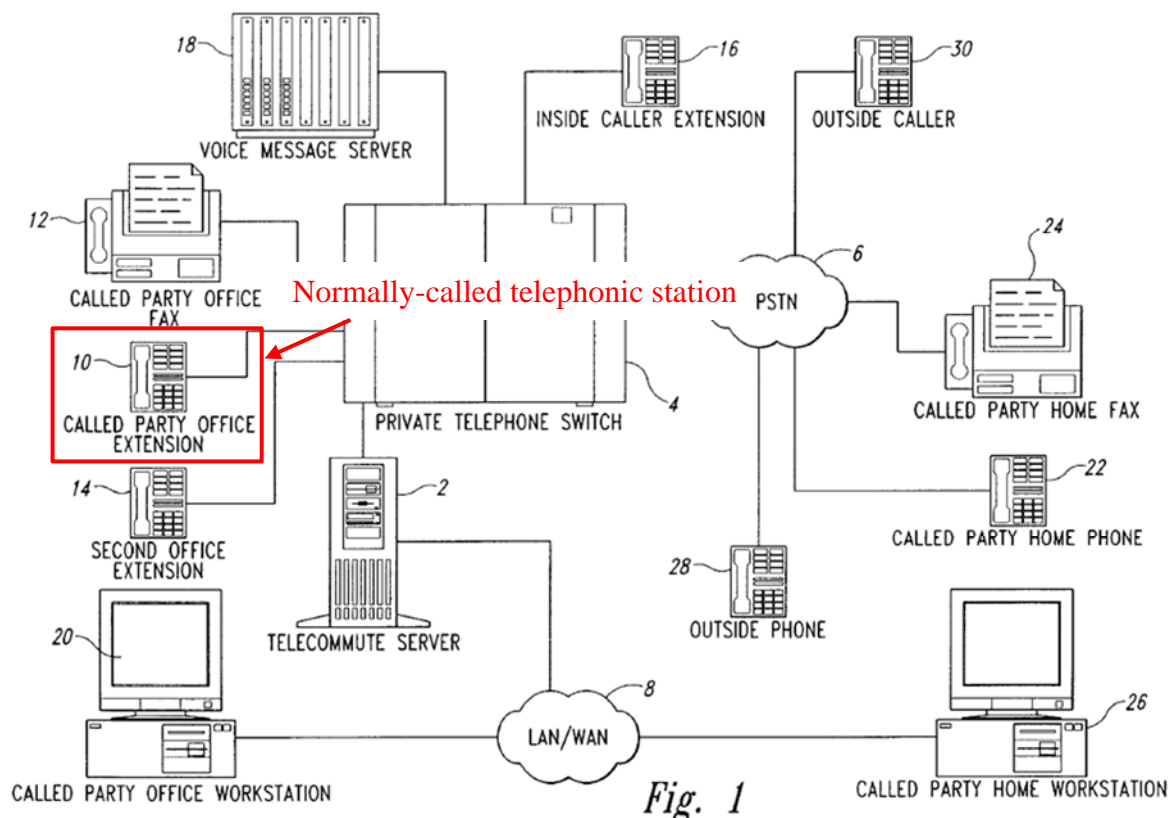
7. Claim 7

Element 7[A]

As previously stated (*supra* Ground 1, 7[A]), Adams describes a subscriber phone (normally-called telephonic station) and a forward-to number, representative of one or more other phones at different locations. EX1004, FIGS. 2, 9, 17; EX1003, ¶155.

Additionally, Chestnut describes that an outside caller places a call to the called party office extension (telephonic station at the normally-called location) and that the called party office extension can be the default telephone number. EX1005, 4:48-5:2, 5:26-30. Notably, the '658 patent describes an office location

as the normally-called location. EX1001, 7:17-21, 8:26-27. FIG. 1 of Chestnut shows the called party office extension:



EX1005, FIG. 1 (annotated); EX1003, ¶156.

For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in the office extension (telephonic station at the normally-called location) being the subscriber phone associated with the subscriber's account. EX1003, ¶157.

Element 7[B]

As previously described (*supra* Ground 1, 7[B], Ground 2, 1[B.2]), Adams describes that a subscriber's account number (a number for a normally-called location) is indexed together with on/off selections and forwarding numbers (values representative of selection). EX1004, FIG. 9. Additionally, Chestnut describes indexing an office extension (at the normally-called location) with an identity of the party, indexing the identity of the party with the identity of the current network logon device (values representative of selection), and indexing identities of logon devices with telephone numbers. EX1005, 4:58-5:2, 6:13-24, 6:33-38; EX1003, ¶158.

For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in the database (index) of Adams indexing an office extension (values representative of the normally-called location) with an identity of the party, indexing the identity of the party with the identity of the current network logon device (values representative of selection), and indexing identities of logon devices with telephone numbers (also values representative of selection), thereby indexing an office extension (values representative of the normally-called location) with the identity of the current network logon device and corresponding telephone number

(values representative of selection). EX1005, 2:25-30, 4:58-5:2, 6:13-24, 6:33-38; EX1003, ¶159.

8. Claim 8

The Adams-Chestnut combination provides claim 8 as detailed above. *Supra*, Ground 1, claim 8, Ground 2, 7[B]; EX1003, ¶160. For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in the database (index) of Adams indexing an office extension (normally-called-location dialing code) with an identity of the party, indexing the identity of the party with the identity of the current network logon device, and indexing identities of logon devices with telephone numbers, thereby indexing an office extension (normally-called-location dialing code) with the identity of the current network logon device and the corresponding phone number. EX1005, 2:25-30, 4:58-5:2, 6:13-24, 6:33-38; EX1003, ¶160.

9. Claim 9

Element 9[A]

As previously discussed (*supra* Ground 1, claim 6, 9[A]), Adams describes that a calling party places a call to the telephone number (normally-called location dialing code) of the subscriber phone. EX1004, 20:3-5, FIG. 11; EX1003, ¶161.

Also as previously discussed (*supra* Ground 2, 7[A]), Chestnut describes

that an outside caller places a call to the called party office extension (normally-called location dialing code) and that the called party office extension can be the default telephone number. EX1005, 4:48-5:2, 5:29-30. For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in the office extension (normally-called location dialing code) being the subscriber phone associated with the subscriber's account. EX1003, ¶162.

Element 9[B]

As previously discussed Ground 1, claim 6, 9[B]), Adams' SCP processes telephone calls in a PSTN. EX1004, 9:37-42. The SCP has a database (index) of call forwarding service data corresponding to a telephone number of the subscriber. EX1004, 9:37-42. The SCP processes incoming calls to the subscriber's telephone number in accordance with call forwarding service data. EX1004, 6:44-49. In response to an incoming telephone call, the SCP compares the called party's telephone number to a list of subscribers in the database, and based on the information for the subscriber in the database (index), determines the forwarding instructions including whether the Flexible Call Forwarding is on or off and the forward-to telephone number. EX1004, 20:1-21:56; EX1003, ¶163.

As previously discussed (*supra* Ground 2, 1[B.2]), Chestnut describes that a telephone call is received and the identity of the called party is determined by

looking up the dialed extension in an index stored in a computer memory.

EX1005, 6:13-24; EX1003, ¶164. The current called party network logon device is determined by comparing the identity of the called party with a list (index) of persons currently logged onto the computer network. *Id.* The telephone number associated with the current called party network logon device is determined by comparing the identity of the logon device with a list (index) of telephone numbers indexed by logon device stored in a memory. EX1005, 6:34-39. The telephone number to which incoming calls should be forwarded is selected based upon a record (index) stored in a memory which associates a forwarding telephone number, such as the number for called party home phone, with a network logon device, such as called party home workstation. EX1005, 4:64-5:2.

For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), implementing Chestnut's suggestion into Adams' system would have predictably resulted in the databases at the SMS and SCP including an index storing an office extension (calling indicia) with an identity of the party, a list (index) including the identity of the party associated with the identity of the current network logon device (values representative of selection), and a list (index) including identities of logon devices indexed with a list of telephone numbers (also values representative of selection) to control call forwarding based on the computer terminal used to log on to the company's LAN, as suggested by Chestnut.

EX1005, 2:25-30, 4:58-5:2, 6:13-24, 6:33-38; EX1003, ¶165. The SCP would select the telephone number to which incoming calls to the subscriber's business telephone number should be forwarded based on the index, which associates a forwarding telephone number, such as the number for subscriber's home phone, with a network logon device, such as the subscriber's home workstation. *Id.*; EX1004, 6:44-47, 9:37-42, 20:1-21:56.

10. Claim 10

As previously discussed (*supra* Ground 1, 1[B.1]-1[B.2], claim 10), Adams describes that the SMS (including a detector and an indexer) stores updated call forwarding service data. EX1004, 7:65-66, 15:62-64; EX1003, ¶166. When a subscriber interacts with the web page to add call forwarding information, the SMS receives the call forwarding information, stores it, and also sends that data to the SCP (also including a detector and indexer). EX1004, 18:1-9. The data stored at the SMS is therefore duplicated by the data stored at the SCP (indexer embodied thereat). *Id.*

11. Claim 11

Chestnut describes a Local Area Network (LAN). EX1005, 2:1-5, FIG. 1. Chestnut explains that the LAN "is fast becoming the technology backbone of today's offices." EX1005, 1:32-37, 1:54-57. Chestnut describes "a telecommunications management system which closely integrates a company's

LAN with its telephone network.” EX1005, 2:1-31. The evidence here shows that a POSITA would have understood that, based on Chestnut’s disclosure, a LAN can be a private network portion of a packet data network. EX1003, ¶167.

For the reasons and known benefits articulated above (*supra* Ground 2, 1[P.1]), a POSITA would have recognized the predictable benefits of applying Chestnut’s suggestion to Adams’ system to integrate a company’s LAN with the telephone network and to control call forwarding based on the computer terminal used to log on to the company’s LAN. EX1005, 2:25-30; EX1003, ¶168. As depicted below, the evidence here demonstrates that the predictable application of Chestnut’s suggestion to Adams’ system would have beneficially produced a system where the web server (including a detector) is embodied at a company’s LAN, and the SCP, SMS, and web server are implemented to additionally provide the functionalities of Chestnut’s telecommute server:

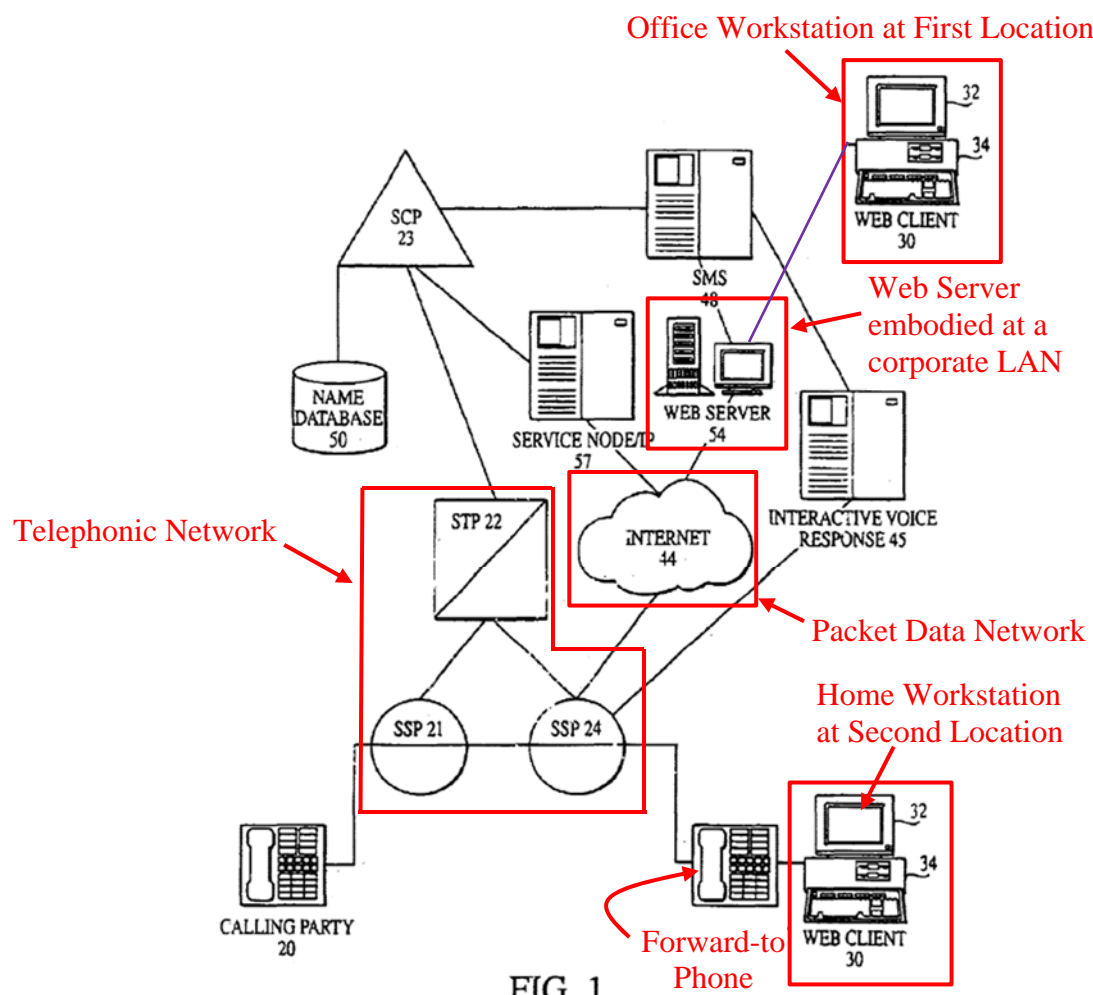
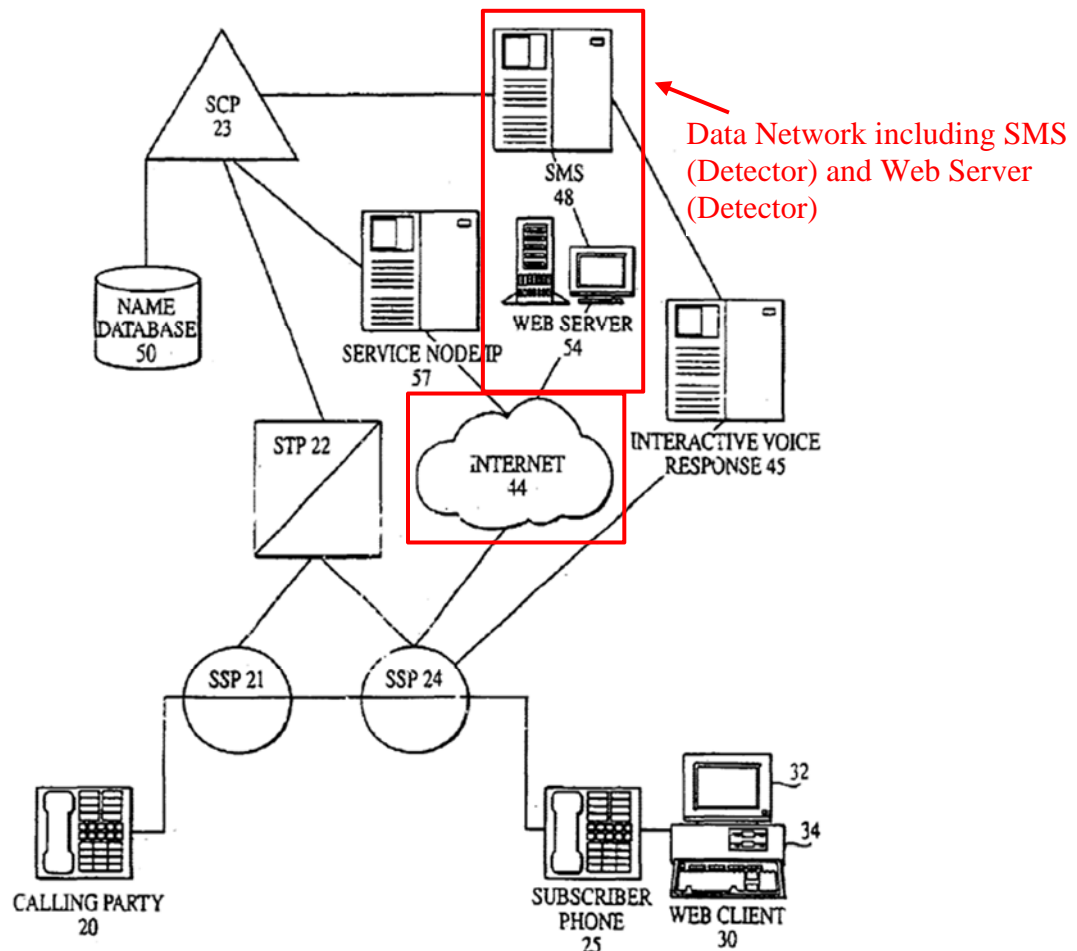


FIG. 1

EX1003, ¶168 (annotating EX1004, FIG. 1 and citing to EX1005, 4:48-5:2, 6:13-24, 6:33-38).

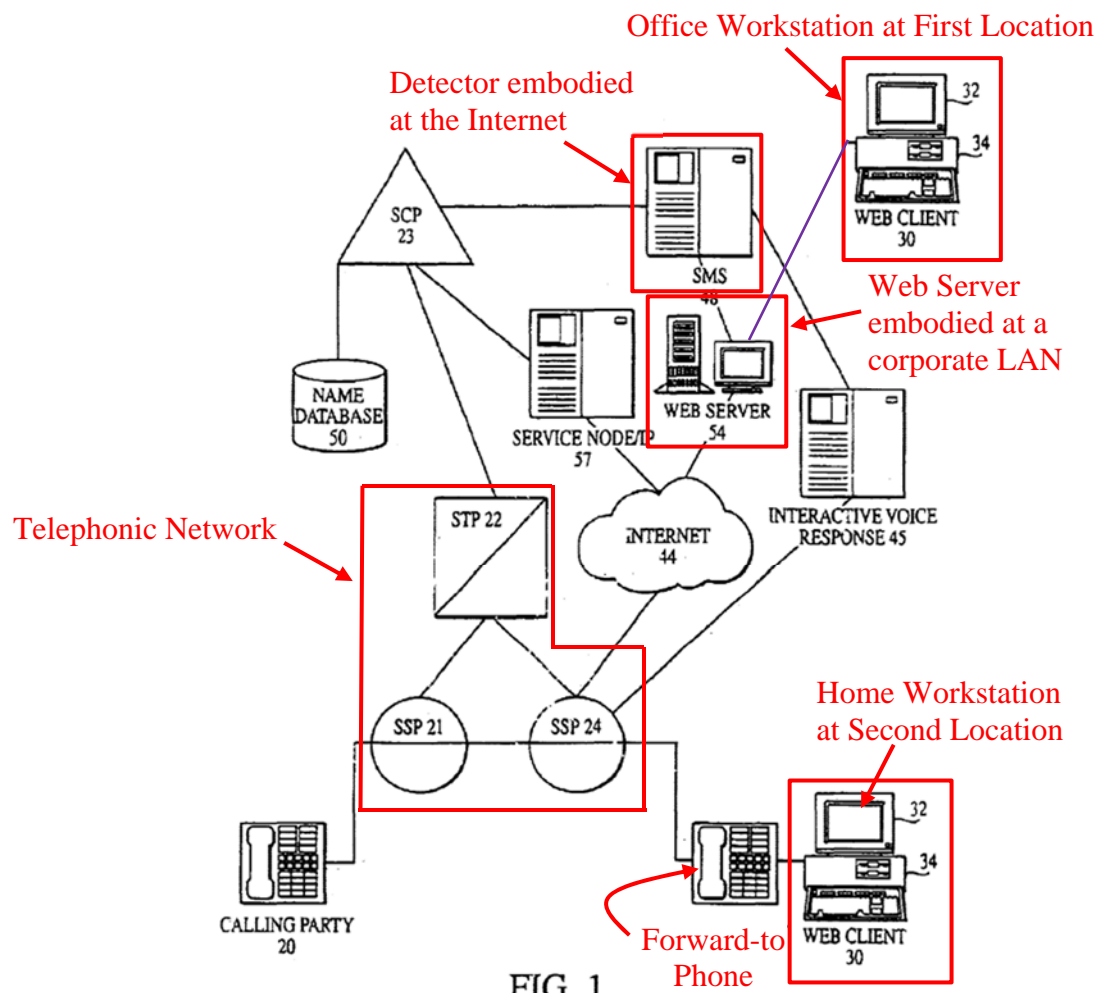
12. Claim 12

As previously discussed (*supra* Ground 1, claim 12), Adams' data network includes a Web client 30, a Web server 54 and a service management system (SMS) 48, connectable through the Internet 44 (public network portion), as shown in FIG. 1:



EX1004, FIG. 1 (annotated), 13:41-56, 22:28-38; EX1003, ¶169.

As depicted below, the evidence here demonstrates that the predictable application of Chestnut's suggestion to Adams' system would have beneficially produced a system where the web server is embodied at a company's LAN, and connectable to the SMS (which includes a detector) through the Internet (public network portion):



EX1003, ¶170 (annotating EX1004, FIG. 1 and citing to EX1004, 13:41-56, 22:28-38; EX1005, 4:48-5:2, 6:13-24, 6:33-38).

13. Claim 13

Element 13[P.1]

To the extent the preamble is treated as a limitation, the Adams-Chestnut combination provides this element of the preamble as detailed above. *Supra*, Ground 2, 1[P.1]; EX1003, ¶171.

Element 13[P.2]

To the extent the preamble is treated as a limitation, the Adams-Chestnut combination provides this element of the preamble as detailed above. *Supra*, Ground 2, 1[P.2]; EX1003, 172.

Element 13[A]

The Adams-Chestnut combination provides the claimed detecting step as detailed above. *Supra*, Ground 2, 1[A.1]-1[A.2]; EX1003, ¶173.

Element 13[B]

The Adams-Chestnut combination provides the claimed forming step as detailed above. *Supra*, Ground 2, 1[B.1]-1[B.2]; EX1003, ¶174.

Element 13[C]

The Adams-Chestnut combination provides the claimed accessing step as detailed above. *Supra*, Ground 1, claim 6; Ground 2, 1[B.2], claim 6; EX1003, ¶175.

Element 13[D]

The Adams-Chestnut combination provides the claimed using step as detailed above. *Supra*, Ground 1, 13[D]; Ground 2, 1[B.2]; EX1003, ¶176.

14. Claim 14

Element 14[A]

The Adams-Chestnut combination provides this element of claim 14 as detailed above. *Supra*, Ground 2, 1[P.1], 2[A]; EX1003, ¶177.

Element 14[B]

The Adams-Chestnut combination provides this additional element of claim 14 as detailed above. *Supra*, Ground 2, 1[A.1]-1[A.2], 2[B]; EX1003, ¶178.

15. Claim 15

The Adams-Chestnut combination provides claim 15 as detailed above. *Supra*, Ground 1, 1[A.2], claims 3-4; Ground 2, 1[A.2], claims 3-4; EX1003, ¶179.

16. Claim 16

Element 16[A]

The Adams-Chestnut combination provides this element of claim 16 as detailed above. *Supra*, Ground 2, 7[A]; EX1003, ¶180.

Element 16[B]

The Adams-Chestnut combination provides this element of claim 16 as detailed above. *Supra*, Ground 2, 7[B]; EX1003, ¶181.

17. Claim 17

The Adams-Chestnut combination provides claim 17 through Adams' disclosure as detailed above. *Supra*, Ground 1, claim 6; Ground 2, 1[B.2], claim 6; EX1003, ¶182.

18. Claim 18

The Adams-Chestnut combination provides claim 18 as detailed above. *Supra*, Ground 2, 7[B], claim 8; EX1003, ¶183.

19. Claim 19

Element 19[A]

The Adams-Chestnut combination provides this element of claim 19 as detailed above. *Supra*, Ground 1, 1[P.1], 5[A], Ground 2, 1[P.1], 5[A]; EX1003, ¶184.

Element 19[B]

The Adams-Chestnut combination provides this additional element of claim 19 as detailed above. *Supra*, Ground 1, 5[B]; Ground 2, 5[B]; EX1003, ¶185.

20. Claim 20

The Adams-Chestnut combination provides claim 20 through Adams disclosure as detailed above. *Supra*, Ground 1, 1[B.1]-1[B.2], claims 6, 10; EX1003, ¶186.

VIII. INSTITUTION SHOULD NOT BE DISCRETIONARILY DENIED

In *Apple Inc. v. Fintiv, Inc.*, the Board enumerated six factors that provide a “holistic view” as to “whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in [a] parallel proceeding.” IPR2020-00019, Paper 11 at 2-3 (PTAB “precedential” Mar. 20, 2020) (“*Fintiv I*”). Guided by precedent, Huawei took affirmative steps to promote the Board’s efficiency and fairness goals. Huawei initiated this proceeding with exceptional diligence, filed a single petition narrowly focused on specific claims within a mere 9 weeks of learning of WSOU’s asserted claims, and provided a stipulation akin to *Sand Revolution* to eliminate overlapping prior art grounds between the instituted IPR proceeding and the Related Litigation. EX1002, XX. These facts, paired with the strong merits of Grounds 1–2, provide compelling reasons to institute. *Sand Revolution II, LLC v. Continental Intermodal Group*, IPR2019-01393, Paper 24, 12 (PTAB “Informative” June 16, 2020).

Relevant Facts—Between September 29, 2020 and October 2, 2020, WSOU filed six separate infringement actions against Huawei involving six unrelated patents asserted against several unrelated products. *See* EX1100. These six lawsuits are concurrently pending in the Western District of Texas (“the Court”) before the Honorable Judge Alan D. Albright. *Id.* The action involving

the '658 patent was assigned Case No. 6:20-cv-00892 (“the Related Litigation”).

The remaining lawsuits are identified by different cases numbers and are not formally consolidated. The district court’s scheduling order indicates that they will be consolidated into two or more groups—with a trial for the “first of the consolidated cases” starting on September 26, 2022 and a subsequent trial(s) for the “remaining consolidated cases” on a later (unknown) date. EX1101, 5.

WSOU served its preliminary infringement contentions on February 5, 2021, but oddly characterized the contentions as “confidential” and did not authorize Huawei’s in-house counsel to view the charts of the preliminary infringement contentions until February 24, 2021. *See* EX1101, 1. As such, this Petition was filed just nine weeks after initially learning of the asserted claims and about six weeks after actually viewing the infringement charts. This Petition was served on Patent Owner even before Huawei’s preliminary invalidity contentions, which are not due until April 12, 2021 (extended from April 7 upon agreement from the parties). *Id.*

The Court set a *Markman* hearing for August 12, 2021, and the parties are scheduled to exchange terms for construction on April 16, 2021. *See* EX1101, 2-3. Per the Court’s default order, fact discovery will formally open on August 16, 2021, two business days after the *Markman* hearing. *See* EX1101, 3. In other words, little discovery—and certainly no meaningful expert discovery regarding

invalidity of the '658 patent—will be completed at the time of the Board's institution decision here.

For purposes of planning earlier dates throughout discovery, etc., the Court set two placeholder trial dates—a first trial starting on September 26, 2022 for an unknown “first” subset of the six asserted patents and a subsequent trial for the “remaining consolidated cases” starting on a date that “will be determined.” EX1101, 5. In other words, a jury trial is scheduled for September 26, 2022, but neither the Court nor any party knows which subset of the six asserted patents will be in “the first of the consolidated cases” for the trial on that date. *Id.* More specifically to the '658 patent at issue here, no party knows whether the '658 patent will be part of “the first of the consolidated cases” for trial starting on September 26, 2022 or part of the “remaining consolidated cases” starting on a later (unknown) date. *Id.* Any allegation to the contrary is pure speculation.

Factor 1 (Stay)—No party in the Related Litigation has request a stay at this time. Huawei currently plans to seek a motion to stay after the Board's decision to institute IPR here because, in Judge Albright's court, a motion filed earlier would be premature. Again, the facts at play here are unique. There are six distinct lawsuits (asserting six unrelated patents) all unrealistically scheduled for trial on the same date. In such unique circumstances, it is unclear how Judge Albright would rule on a motion to stay for the particular lawsuit involving the '658 patent,

especially after IPR is instituted against the '658 patent months before the due date for Patent Owner to amend its complaint (December 2021) and long before expert reports/discovery (March 2022). This cloud of uncertainty means Factor 1 is neutral.

Factor 2 (Trial Date)—While the Court set September 26, 2022 as a placeholder trial date for an unknown “first” subset of the six asserted patents and a later (unknown) trial for the “remaining consolidated cases,” it is far from certain whether the '658 patent will be part of the “first” trial or the later second trial. EX1105, 5. The only certainty at this time is that several of the six patents will not be part of the September 26, 2022 trial because they will be grouped into the “remaining consolidated cases.” *Id.* Presently, there is no hint as to how the scheduling shuffle will play out, and it would be erroneous for any party to speculate that the '658 patent will necessarily be excluded from the “remaining consolidated cases.” *Id.*

The *Fintiv* panel noted that the Board “generally take[s] courts’ trial schedules at face value absent some strong evidence to the contrary.” *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15, 13 (PTAB, “informative,” May 13, 2020) (“*Fintiv II*”). For the reasons detailed above, such “strong evidence” exists on this record. Due to WSOU’s litigation tactics, neither the Court nor any party knows which one of the six asserted patents will be the subject of the trial starting on

September 26, 2022. There is, in effect, no *certain* date for a jury trial that specifically addresses the '658 patent.

The “informative” guidance in *Sand Revolution* aligns with the facts of this case. *Sand Revolution*, IPR2019-01393, Paper 24 at 8-10. Even if Patent Owner (improperly) speculates the district court will necessarily insert the '658 patent into the “first” subset for a jury trial on September 26, 2022, the narrow gap in time between the jury’s final verdict (end of September 2022 or later) and the Board’s projected Final Written Decision (October 2022) is less than one month. The panel in *Sand Revolution*, also facing meaningful questions of uncertainty about the trial date, weighed Factor 2 “marginally” *against* denial with a three-month time gap. *Id.* The *Sand Revolution* guidance demonstrates the proper result when the district court’s “evolving schedule” makes it “unclear” when the trial would be held. *Id.* A similar lack of clarity exists in this case but for a slightly different reason—there is significant uncertainty as to whether the '658 patent will be in the “first” subset for trial on September 26, 2022 or in the second subset of the “remaining consolidated cases” for trial at a later unknown date. EX1101, 5.

Similarly, the Board’s analysis in *Google LLC, et al. v. Parus Holdings, Inc.* is compelling. *See* IPR2020-00846, Paper 9, 12-14 (PTAB Oct. 21, 2020). There, the district court reserved a broad range of “predicted” trial dates but declined to specify further. *Id.* (noting a trial date range of July 12-30, 2021, and further

noting the court’s statement that it was “not going to pick a date right now”). With “only three months” between the range of trial dates and a final written decision, the Board deemed Factor 2 “neutral” based on “substantial uncertainty in the Texas court’s ‘Predicted Jury Selection/Trial’ date.” *Id.*

The less-than-a-month time gap presently at issue is narrower than *Sand Revolution* and the trial date uncertainty is comparable to *Google v. Parus*. The well-reasoned analysis in *Sand Revolution* weighed Factor 2 against discretionary denial. A similar outcome is appropriate here.

Factor 3 (Investment)—The Related Litigation is currently in its infancy. Huawei has yet to serve its preliminary invalidity contentions, and the parties have yet to exchange proposed terms for construction. Huawei acted promptly in response to WSOU’s identification of asserted claims in preliminary infringement contentions, filing this Petition only nine weeks after initially learning of the asserted claims and about six weeks after Huawei’s in-house counsel was finally authorized to view the charts of the preliminary infringement contentions. *See* EX1101, 1.

At the projected date of institution (October 2021), the fact discovery period will have five more months of duration before the close of fact discovery (March 24, 2022), and expert reports/discovery will not even start until later (closing in May 19, 2022). EX1101, 4. Beyond a *Markman* order, which is not dispositive

here and is unrelated to the invalidity issues based upon the prior art publications cited in this Petition, the Court will have not issued any substantive orders relevant to invalidity based on prior art publications.

The facts here compare favorably to *Fintiv*. In that case, also co-pending with litigation at the Western District of Texas, the petitioner filed *five months* after receiving preliminary infringement contentions, but the petition here was filed within nine weeks of receiving the asserted claim numbers (and just six weeks after Patent Owner authorized Huawei's in-house counsel to view the claim charts). *See Fintiv II* at 9. There, "[a]t the time of filing the Petition, the parties were in the midst of preparations for the *Markman* hearing," while here, the parties have not even exchanged terms. *Id.*

The "informative" guidance in *Sand Revolution* is telling here too. By the time of institution in this proceeding, the Related Litigation will be at a similar posture where "aside from the district court's *Markman* Order, much of the district court's investment relates to ancillary matters untethered to the validity issue itself." *Sand Revolution*, IPR2019-01393, Paper 24, 10-11. The parallels are also notable because:

[M]uch work remains in the district court case as it relates to invalidity: fact discovery is still ongoing, expert reports are not yet due, and substantive motion practice is yet to come.

Id. at 11 (internal citation omitted); *see also Fintiv I* at 10 (“If, at the time of the institution decision, the district court has not issued orders related to the patent at issue in the petition, this fact weighs against exercising discretion to deny institution”).

In fact, the circumstances under Factor 3 here are similar to *Sotera*. *See Sotera Wireless, Inc. v. Masimo Corporation*, IPR2020-01019, Paper 12, 16-17 (PTAB Precedential Dec. 1, 2020) (“much other work remains in the parallel proceeding as it relates to invalidity” and the “explanation for timing of the Petition is reasonable, ... particular in view of the large number of patents and claims”). In this case too, Factor 3 “weighs in favor of not exercising discretion to deny” as a result of “the relatively limited investment in the parallel proceeding to date” and “the fact that the timing of the Petitioner was reasonable.” *Id.* at 17.

Factor 4 (Overlap)—As an initial matter, no party currently knows whether the ’658 patent will be part of the “remaining consolidated cases” for second trial starting on a later (unknown) date after the Board’s final written decision here. EX1101, 5; *supra*, Analysis of Factors 1-2. In such circumstances, there would be absolutely no overlap between invalidity grounds addressed in the Board’s final written decision and in the later jury trial because §315(e)(2) necessarily forbids it. Given the undefined nature of which one of the jury trials will actually include the ’658 patent, these questions related to “overlap” in Factor 4 are, at best,

speculative.

Moreover, even if Patent Owner indulges in speculation to assume that the '658 patent will necessarily be part of the “first” subset of cases for trial on September 26, 2022 rather than in the later subset, Huawei’s stipulation here “mitigates” concerns related to overlapping prior art grounds. *Sand Revolution*, IPR2019-01393, Paper 24, 11-12; *see* EX1102, XX (not pursue “the same prior art grounds”). According to this informative guidance, Factor 4 weighs at least “marginally in favor not exercising discretion to deny IPR.” *Sand Revolution*, IPR2019-01393, Paper 24, 12.

Factor 5 (Parties)—Because the parties here and at the District Court are the same, Factor 5 favors denial if trial precedes the Board’s Final Written Decision and favors institution if the opposite is true (due to the 35 U.S.C. 315(e)(2) estoppel provision). *Google*, IPR2020-00846, Paper 9, 20-21 (“[W]e decline to speculate as to whether we are likely to address the challenged patent before the Texas court. Thus, [Factor 5] is neutral.”). Neither circumstance can be confirmed in this case without improper speculation because the *actual* date of a jury trial involving the '658 patent is uncertain. EX1101, 5 (a later unknown trial for “the remaining consolidated cases”). Under these unique circumstances, Factor 5 is neutral.

Factor 6 (Merits and Other Circumstances)—The merits of this Petition

are particularly strong. Section VII above presents two prior art grounds (Grounds 1-2) against the '658 patent's claims. As discussed, the prior art and arguments at issue here are materially different from those considered by the Examiner during prosecution. The strength of the merits alone is enough to outweigh any inefficiencies born of parallel litigation. *See Fintiv*, 15.

And there are additional circumstances that also favor institution, such as the effect on "the economy [and] the integrity of the patent system." *Consolidated Trial Practice Guide* ("CTPG"), 56 (quoting 35 U.S.C. § 316(b)). Relevant to the former, WSOU, an entity specializing in patent licensing and negotiation, is asserting the '658 patent's overbroad claims against Huawei's communication diversion service. *See* EX1009. Fully vetting an eighteen-year-old patent (filed 2003) only now asserted against Huawei's product would be beneficial to the economy.

The integrity of the patent system equally weighs in favor of institution. The analysis in Section VII of this Petition shows that the '658 patent's Challenged Claims are too broad, and the dubious prosecution record does not adequately explain why the Examiner issued a Notice of Allowance in the first place (*see supra* Section IV.B). AIA trials were intended to "improve patent quality and limit unnecessary and counterproductive litigation costs." *CTPG*, 56 (quoting H.R. Rep. No. 112-98, pt. 1, at 40 (2011)). This case provides an opportunity to fulfill those

objectives.

For all these reasons, Factor 6 and the *Fintiv* Factors as a whole strongly favor institution. Finally, Petitioner notes the ongoing legal challenge to discretionary denials of IPR based on the *Fintiv* and *NHK* precedential decisions (e.g., *Apple Inc. et al. v. Iancu*, No. 5:20-cv-06128 (N.D. Cal.)), and reserves the opportunity to address the result of that case and any impact in this proceeding.

IX. CONCLUSION

Petitioner requests IPR of the Challenged Claims pursuant to Grounds 1-2.

Respectfully submitted,

Dated: April 6, 2021

/Kim H. Leung/
Michael T. Hawkins, Reg. No. 57,867
Kim H. Leung, Reg. No. 64,399

(Control No. IPR2021-00691)

Attorneys for Petitioner

Attorney Docket No. 35548-0134IP1
IPR of U.S. Patent No. 7,460,658

CERTIFICATION UNDER 37 CFR § 42.24

Under the provisions of 37 CFR § 42.24(d), the undersigned hereby certifies that the word count for the foregoing Petition for *Inter Partes* Review totals 13,718 words, which is less than the 14,000 allowed under 37 CFR § 42.24.

Respectfully submitted,

Dated: April 6, 2021

/Kim H. Leung/
Michael T. Hawkins, Reg. No. 57,867
Kim H. Leung, Reg. No. 64,399

Attorneys for Petitioner

CERTIFICATE OF SERVICE

Pursuant to 37 CFR §§ 42.6(e)(4)(i) *et seq.* and 42.105(b), the undersigned certifies that on April 6, 2021, a complete and entire copy of this Petition for *Inter Partes* Review and all supporting exhibits were provided via Federal Express, to the Patent Owner by serving the correspondence address of record as follows:

Docket Administrator – Room 3B-212F
Alcatel-Lucent USA Inc.
600-700 Mountain Avenue
Murray Hill, NJ 07974-0636

/Edward G. Faeth/

Edward Faeth
Fish & Richardson P.C.
60 South Sixth Street, Suite 3200
Minneapolis, MN 55402
(858) 678-5667